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BUREAU OF SHIPS GROUP TECHNICAL INSPECTION REPORT.

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By Authority JOINT CHIEFS OF STAFF JCS 1795/36 DATED 15 APRIL 1949
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OPERATION CROSSROADS.

U.S.S. LCT's 705, 816, 818, 874, 1013,

1078, 1112, 1113, 1114, 1115.

TEST BAKER [U] • (E)

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APPROVED:

F.X. Forest,
Captain, U.S.N.

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USS LCT's 705, 816, 818, 874,
1013, 1078, 1112,
1113, 1114, 1115

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BUREAU OF SHIPS GROUP
TECHNICAL INSPECTION REPORT

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USS LCT 705

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

There was no flooding, hence no change in drafts or list.

- (b) Structural damage.

No damage.

- (c) Other damage.

None.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

- (e) Effects apparently peculiar to the atom bomb.

None.

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III. Effects of Damage.

(a) Effect on machinery, electrical, and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on water-tight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

It is considered that this vessel was too far from the center of the blast to suffer damage as a result of this test.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

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TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

There was no flooding, hence no change in drafts or list.

- (b) Structural damage.

No damage.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

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III. Results of Test on Target.

- (a) Effect on machinery, electrical, and ship control.

Not observed.

- (b) Effect on gunnery and fire control.

Not observed.

- (c) Effect on watertight integrity and stability.

None.

- (d) Effect on personnel and habitability.

None.

- (e) Effect on fighting efficiency.

None.

IV. General Summary.

No comments.

V. Recommendations.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Minimum
Ammunition	
Potable and reserve feed water	No special adjustment required.
Salt water ballast	

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Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

No data taken by machinery group.

- (b) Structural damage.

No data taken by machinery group.

- (c) Other damage.

Test "B" had no effect on machinery or ship control as far as could be determined by visual inspection.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

No evidence.

- (d) Pressure.

No evidence.

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- (e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

- (a) Effects on manning and ship control.

There was no damage.

- (b) Effects on gunnery and fire control.

No comment.

- (c) Effect on water-tight integrity and stability.

No comment.

- (d) Effect on personnel and habitability.

Test "B" had no effect on personnel and habitability other than the possible effect of radioactivity.

- (e) Total effect on fighting efficiency.

Test "B" had no effect on fighting efficiency other than the possible effect of radioactivity.

IV. General Summary of Observers' Impressions and Conclusions.

The vessel was outside the effective range of physical damage of the explosion from Test "B". No comment is offered here as to the effect of radioactivity.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Drafts and list were not observed.

There was no flooding.

- (b) Structural damage.

None.

- (c) Other damage.

This vessel received no electrical damage as a result of test "A".

II. Forces Evidenced and Effects Noted.

- (a) Heat.

There was no evidence of heat.

- (b) Fires and explosions.

There was no evidence of fires or explosions.

- (c) Shock.

There was no evidence of shock.

- (d) Pressure.

There was no evidence of pressure.

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- (e) Any effects apparently peculiar to the Atom Bomb.

There were no effects noted that are considered peculiar to the Atomic Bomb other than radioactivity.

III. Effects of Damage.

- (a) Effect on electrical equipment and ship control.

None.

- (b) Effect on gunnery and fire control.

None.

- (c) Effect on watertight integrity and stability.

None.

- (d) Effect on personnel and habitability.

The only effects on personnel and habitability would have been that due to radioactivity. The extent of such effects is unknown.

- (e) Total effect on fighting efficiency.

The only effect on the vessel's fighting efficiency would have been from possible personnel casualties as a result of radioactivity. From a material standpoint there was no effects on the vessel's fighting efficiency.

IV. General Summary of Observers Impressions and Conclusions.

It is considered that this vessel was too far from the center of the blast to suffer damage as a result of this test.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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APPENDIX

PHOTOGRAPHS

TEST BAKER

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USS LCT 705



AB-CR-227-283-131. View from starboard beam after Test B.

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BUREAU OF SHIPS GROUP
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USS LCT 816

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, sources.

Twenty four minutes after the burst the LCT 816 was observed alongside the LST 133. The following day it was observed that the craft was down by the stern, and the craft was beached to preclude the possibility of her sinking. When the craft was inspected on the beach 18 days after the test, all engine room spaces were flooded to a depth of about three feet. There is a normal amount of water in the compartments under the tank deck.

(b) Structural damage.

There is moderate dishing of superstructure bulkheads, and handrails are bent. The wooden mast is broken off. Bulwarks are bowed to port about 12 inches.

(c) Other damage.

The electrical equipment and machinery were not operable due to flooding of the machinery spaces. Electrical equipment and machinery outside the machinery spaces suffered no visible damage except that two light bulbs were broken and the starboard side light was shattered, apparently by some water. A dislodged bunk ripped out several lighting cables in the officers' quarters.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None.

(b) Fires and explosions.

None.

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(c) Shock.

None.

(d) Pressure.

There is no evidence of high blast pressure. There is evidence that a large amount of water struck the craft on the starboard side high enough to damage railings, etc., on top of the pilot house. The craft was thrown about sufficiently to scatter all loose equipment and fittings in the compartments and on the tank deck.

(e) Effects apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

(a) Effect on machinery, electrical, and ship control.

The spaces housing propulsion equipment were completely flooded, resulting in complete loss of operability.

(b) Effect on gunnery and fire control.

Flooding of the machinery spaces caused loss of all power, but on a ship of this type there would have been no direct effect on gunnery or fire control.

(c) Effect on water-tight integrity and stability.

Sufficient flooding occurred to require beaching of the craft. It is possible that the flooding of the engine room spaces was caused by opening of shell seams or by leaking stern tubes, but the cause could not be definitely determined. The stability might have been adversely affected, but it is believed that the craft would have been endangered primarily by loss of buoyancy rather than by loss of stability.

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(d) Effect on personnel and habitability.

Personnel and habitability would have been adversely affected by radioactivity and the influx of large amounts of water. The loss of power due to flooding would have serious effect on personnel and habitability because of loss of pumping facilities ventilation, lighting and refrigeration.

(e) Total effect on fighting efficiency.

Aside from the effects of personnel casualties, there would have been a moderate loss in fighting efficiency, providing flooding could have been controlled. If flooding could not have been controlled the efficiency of the craft would have been a total loss.

IV. General Summary of Observers' Impressions and Conclusions.

This ship suffered serious damage to machinery and electrical equipment in Test B, because of flooding only.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

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TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Twenty four minutes after the burst the LCT 816 was observed alongside the LST 133. The following day it was observed that the craft was down by the stern, and the craft was beached to preclude the possibility of her sinking. When the craft was inspected on the beach 18 days after the test, all engine room spaces were flooded to a depth of about three feet. There is a normal amount of water in the compartments under the tank deck.

- (b) Structural damage.

There is moderate dishing of superstructure bulkheads, and handrails are bent. The wooden mast is broken off. Bulwarks are blown to port about 12 inches.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

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(c) Shock.

None.

(d) Pressure.

There is no evidence of high blast pressure. There is evidence that a large amount of water struck the craft on the starboard side high enough to damage railings, etc. on top of the pilot house. The draft was thrown about sufficiently to scatter all loose equipment and fittings in the compartments and on the tank deck.

(e) Effects peculiar to the Atom Bomb.

Not observed.

III. Results of Test on Target.

(a) Effect on machinery, electrical, and ship control.

Not observed.

(b) Effect on gunnery and fire control.

Not observed.

(c) Effect on watertight integrity and stability.

Sufficient flooding occurred to require beaching of the craft. It is possible that the flooding of the engine room spaces was caused by opening of shell seams or by leading stern tubes, but the cause could not be definitely determined. The stability might have been adversely affected, but it is believed that the craft would have been endangered primarily by loss of buoyancy rather than by loss of stability.

(d) Effect on personnel and habitability.

Personnel and habitability would have been adversely affected by radioactivity and the influx of large amounts of water.

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(e) Effect on fighting efficiency.

Aside from the effects of personnel casualties, there would have been a moderate loss in fighting efficiency, providing flooding could have been controlled. If flooding could not have been controlled the efficiency of the craft would have been a total loss.

IV. General Summary.

No comment.

V. Preliminary Recommendations.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Minimum
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast	quired.

Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Hull Damage.

There is moderate dishing of superstructure bulkheads. Bulwarks are bowed to port about 12 inches. General views of the exterior are shown on pages 43 to 59 inclusive.

B. Superstructure.

There is a general moderate dishing of the starboard superstructure. Handrails and the IFF antennae are bent. (Photos 4046-9, 10, 11, 12 pages 60, 61, 62, and 63). The port superstructure suffered some mild dishing. The stub of the wood mast broke off and a portion of it was found on the tank deck. (Photo 4045-2, page 64).

E. Weather Deck.

The port and starboard bulwarks are bowed to port about 12 inches. Loose equipment and fittings have been scattered on the tank deck. (Photos 4045-1, 2, 4, and 5, pages 65, 64, 66, and 67).

G. Interior Compartments (Above Waterline).

Loose equipment and fittings in interior spaces have been scattered (Photo 4045-3, page 68).

J. Underwater Hull.

The cause of the flooding of the engine room spaces is not definitely determined. After the craft was beached no particular damage was observed to exposed portions of the shell.

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L. Flooding.

Twenty four minutes after the burst the LCT 816 was observed alongside the LST 133. The following day it was observed that the craft was down by the stern, and the craft was beached to preclude the possibility of her sinking. All engine room spaces were flooded to a depth of about three feet. There is about a normal amount of water in the compartments under the tank deck.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

All three main machinery and the two diesel generator spaces are entirely flooded. The source of flooding is unknown.

- (b) Structural damage.

No comment.

- (c) Other damage.

Due to the flooded condition of the machinery spaces, inspection below decks could not be made. Top side machinery appears to be undamaged as far as can be determined by visual inspection.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

No evidence.

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(d) Pressure.

No evidence.

(e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

(a) Effect on machinery and ship control.

All machinery in the spaces below deck is inoperable because of the flooding. It is believed that had not flooding occurred, the machinery plant would not have been affected by Test "B".

(b) Effect on gunnery and fire control.

No comment.

(c) Effect on water-tight integrity and stability.

Water-tight integrity was affected in the engine space but it cannot be determined whether the flooding was a primary effect of the Atomic Bomb.

(d) Effect on personnel and habitability.

Test "B" had no effect on personnel or habitability other than the effect of radioactivity.

(e) Total effect on fighting efficiency.

Fighting efficiency is reduced to zero, but if the flooding was from normal seepage and had the crew been aboard, fighting efficiency would not have been effected.

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IV. General Summary of Observers' Impressions and Conclusions.

The vessel has sustained no other damage than that incident to flooding.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Machinery Damage.

All three main machinery and the two diesel generator spaces are entirely flooded, thereby making all machinery in these space inoperable. The machinery outside these spaces appears to be undamaged.

(a) Overall condition.

Due to its flooded condition the vessel is without power and light. It was beached shortly after Test "B".

(b) Areas of major damage.

Machinery spaces.

(c) Primary causes of damage.

The direct cause of flooding could not be determined since it was impossible to enter the flooded spaces.

(d) Effect of target test on overall operation of machinery plant.

The machinery plant is completely inoperative as a result of machinery space flooding.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

This ship was beached after the test. The machinery spaces were completely flooded and could not be entered.

- (b) Structural damage.

Not observed.

- (c) Other damage.

The electrical equipment was not operable due to flooding of the machinery spaces. Electrical equipment outside the machinery spaces suffered no visible damage except that two light bulbs were broken and the starboard side light was shattered, apparently by some missile. A dislodged bunk ripped out several lighting cables in the officers' quarters.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

None.

- (c) Shock.

There was no apparent shock damage to electrical

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equipment except that two light bulbs were broken. Bunks, desks, chairs, deck gear and loose equipment was scattered about as if shock had dislodged it.

(d) Pressure.

There was no evidence of pressure damage to electrical equipment.

(e) Any effects apparently peculiar to the Atom Bomb.

None other than radioactivity.

III. Effects of Damage.

(a) Effect on propulsion and ship control.

The spaces housing propulsion equipment were completely flooded, resulting in complete loss of operability.

(b) Effect on gunnery and fire control.

Flooding of the machinery spaces caused loss of all power, but on a ship of this type there would have been no direct effect on gunnery or fire control.

(c) Effect on watertight integrity and stability.

Not observed.

(d) Effect on personnel and habitability.

The loss of power due to flooding would have serious effect on personnel and habitability because of loss of pumping facilities, ventilation, lighting and refrigeration.

(e) Effect on fighting efficiency.

If the flooding could not have been controlled this ship could have served as little more than a stationary gun platform.

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IV. General Summary of Observers' Impressions and Conclusions.

This ship suffered serious damage in Test "B", but it is believed that the direct electrical damage, such as due to shock, would have been minor had it been possible to control the flooding.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Electrical Damage.

(a) Overall condition.

The machinery spaces were completely flooded, submerging the main switchboard, the two auxiliary generators, the batteries for engine-starting, the bilge pump and motor, a motor-generator set, and all the starting panels.

(b) Areas of major damage.

The machinery spaces were the spaces suffering the major damage.

(c) Primary causes of damage in each area of major damage.

Damage to the hull apparently caused flooding which resulted in indirect damage to electrical equipment.

(d) Effect of target test on overall operation of electric plant.

1. Ship's service generator plant - flooded.
2. Engine and boiler auxiliaries - engine auxiliaries flooded.
3. Electrical propulsion - not applicable.
4. Communications - operable except where lack of care made phones inoperable.

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5. Fire control circuits - not applicable.
6. Ventilation - operable except for lack of power due to flooding.
7. Lighting - operable except for two lamps broken in Test "B", two more broken in Test "A", and except for lack of power due to flooding.

(e) Types of equipment most affected.

Since the majority of electrical damage was of an indirect nature due to flooding, no particular types of equipment were affected more than others.

D. Generators - Ship's Service.

Both ship's service generators were completely submerged due to flooding of the machinery spaces. Not accessible for inspection.

F. Switchboards, Distribution and Transfer Panels.

The battery charging and distribution switchboard and the generator switchboard were completely submerged due to flooding of the machinery spaces. This equipment was not accessible for inspection.

G. Wiring, Wiring Equipment and Wireways.

All wiring and wiring equipment in the machinery spaces was submerged.

Several lighting cables were torn loose in the officers' quarters, apparently by a berth which had broken away and fallen due to shock.

There was no other damage to wiring and wiring equipment attributable directly or indirectly to the subsurface blast.

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J. Portable Batteries.

The three 12 volt starting batteries in the machinery spaces were completely submerged. The cover was missing from the starting battery for the anchor windlass engine. This battery is in a case located topside near the engine. Water completely filled the case and flooded this battery. The battery cover may have been displaced by shock and was probably not secured in place originally.

K. Motors, Motor-Generator Sets and Motor Controllers.

All motors, motor-generator sets and controllers in the machinery spaces were completely submerged and were not accessible for inspection.

Vent motors and controllers in the living spaces apparently were undamaged.

L. Lighting Equipment.

All lighting equipment in the machinery spaces was submerged and not accessible for inspection.

Two light bulbs were shattered in the officers' quarters, apparently by impact from a berth which had been dislodged due to shock.

The starboard running light suffered a broken bulb and globe apparently due to some missile.

The masthead light was missing, the top part of the mast having been dislodged during Test "A".

T. Indicating Systems.

No damage observed to equipment in living quarters and pilot house. Contact makers for lubricating oil and circulating water alarm systems were submerged due to flooding of the machinery spaces.

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W. Miscellaneous.

The 2KW gasoling-driven generator set had toppled over on its side and is water-soaked. This unit was employed for supplying night power and lighting. It was located on the fantail but was not secured to the deck. This unit is not operable and requires a complete overhaul before it can be used.

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APPENDIX

PHOTOGRAPHS

TEST BAKER

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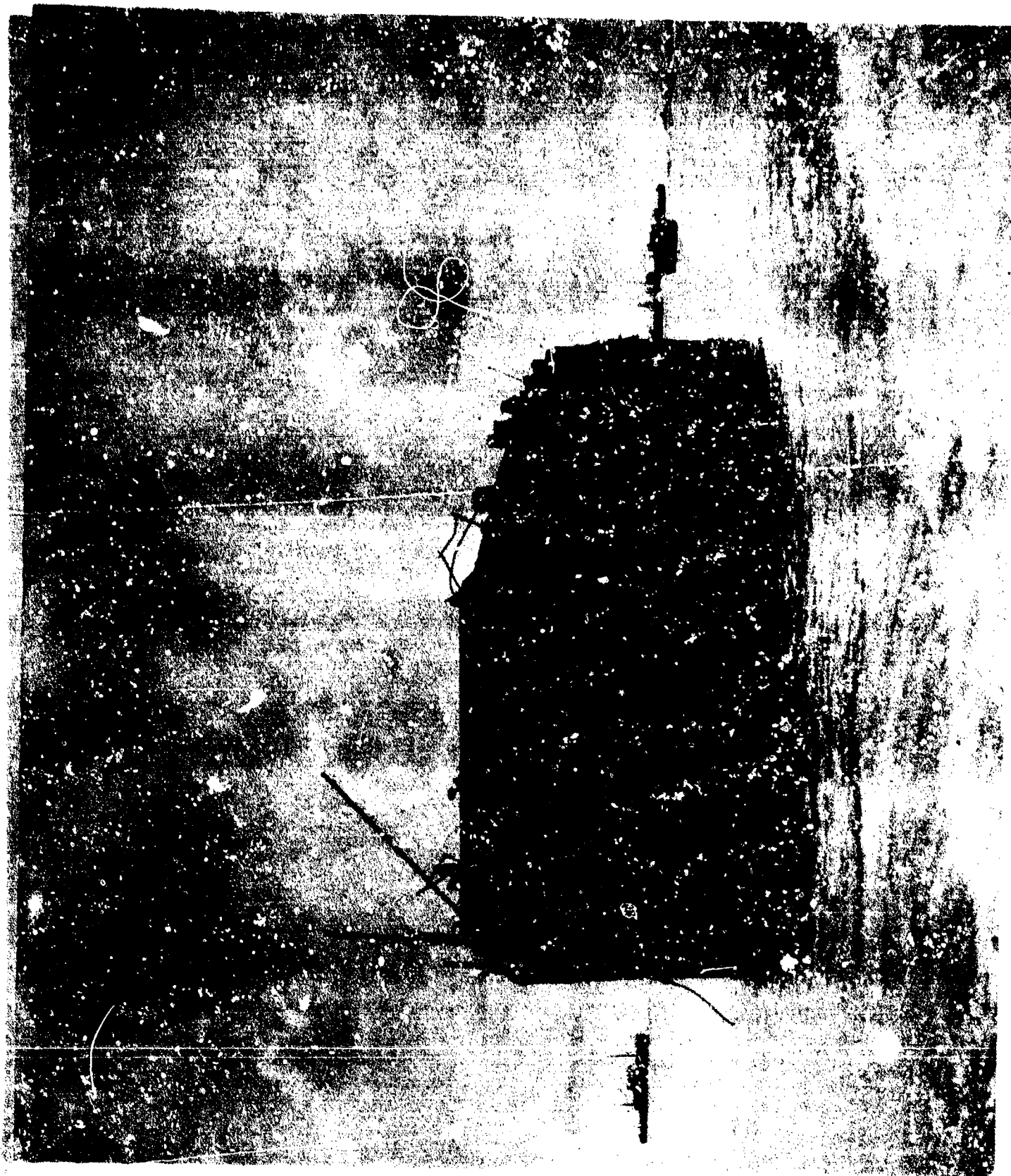
BB-CR-227-519-10. View from dead ahead before Test B.

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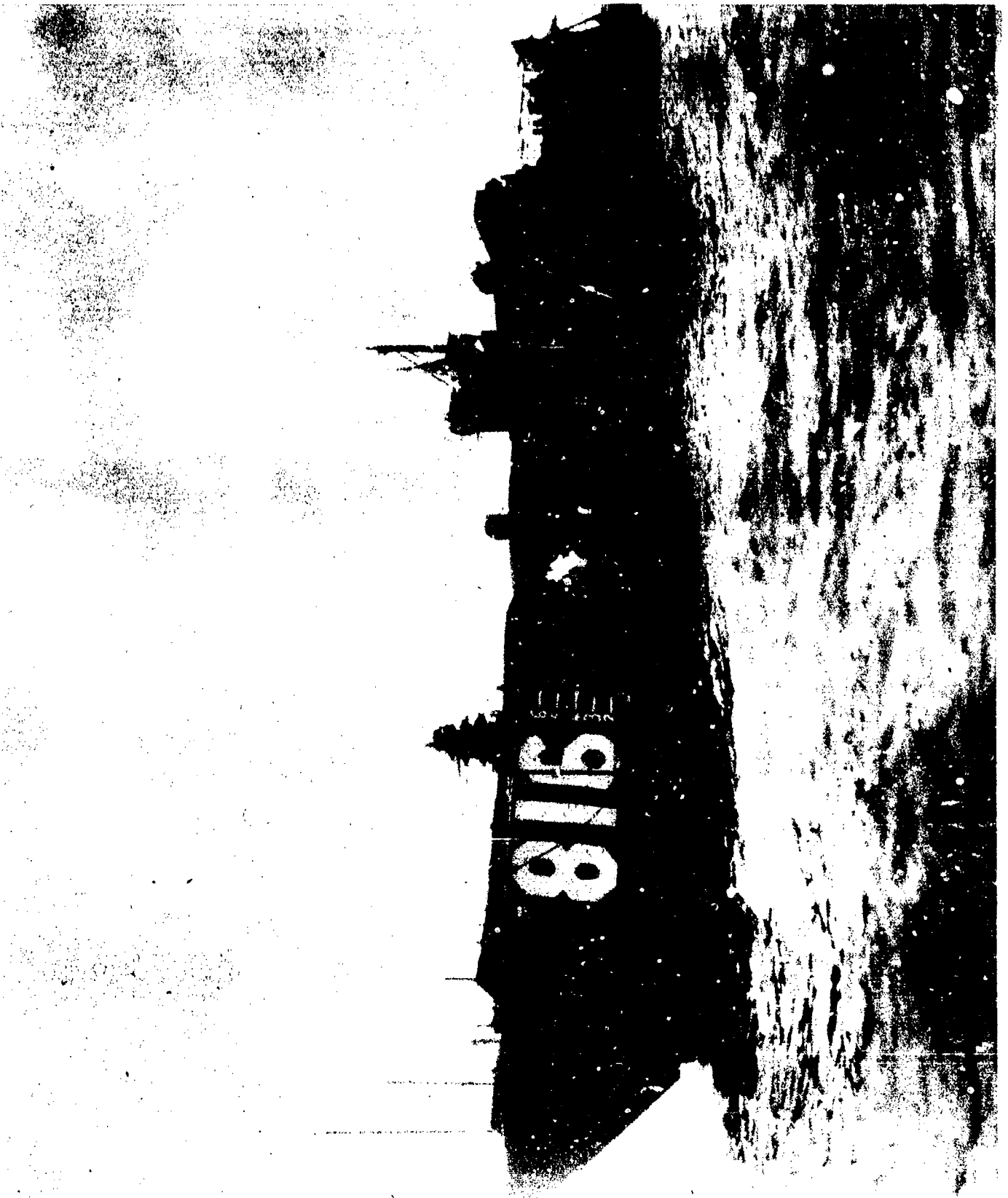


AB-CR-227-290-24. View from dead ahead after Test B.

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BB-CR-227-519-11. View from off port bow before Test B.

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AB-CR-227-290-23. View from off port bow after Test B.

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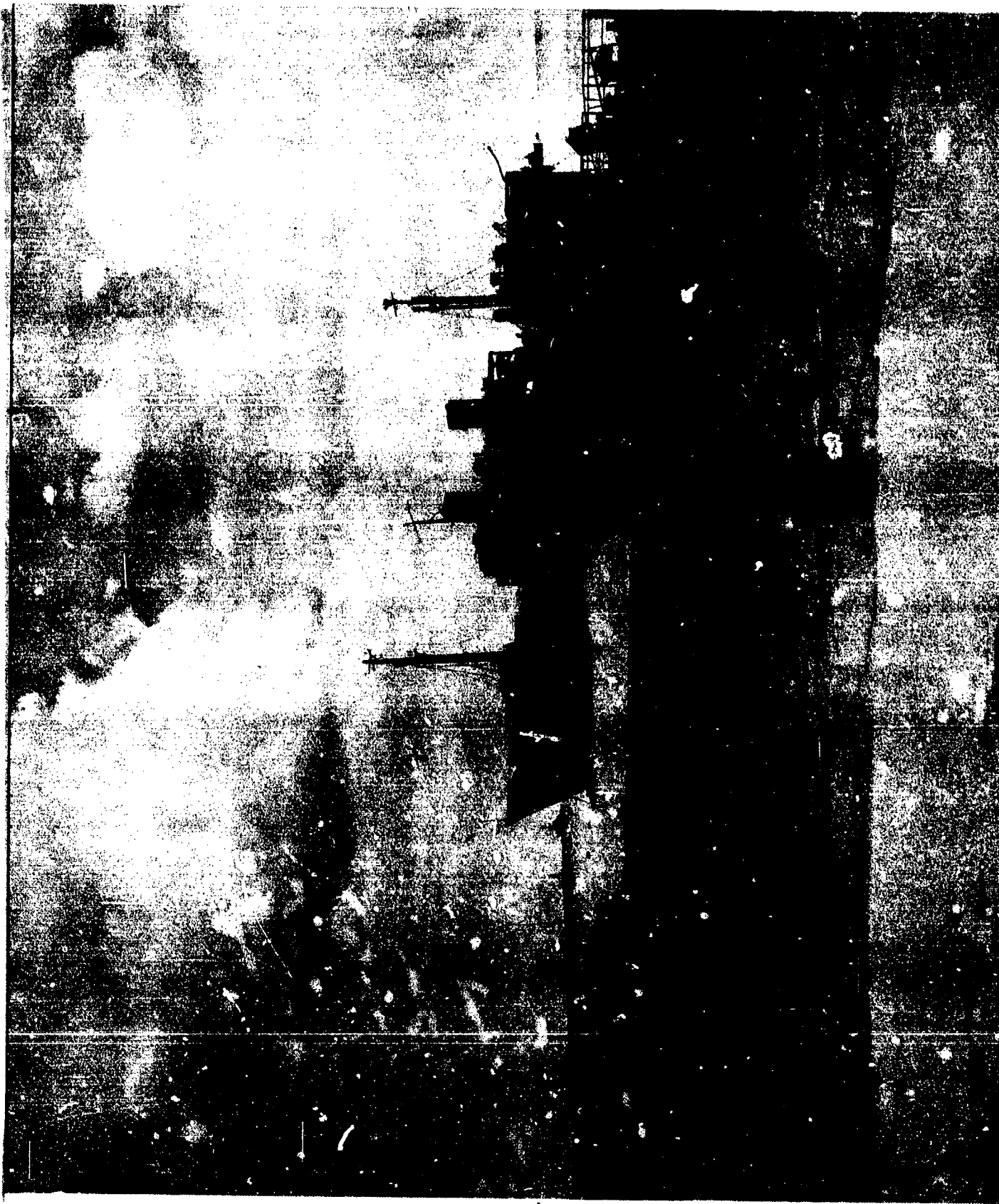
BB-CR-227-519-12. View from off port beam before Test B.

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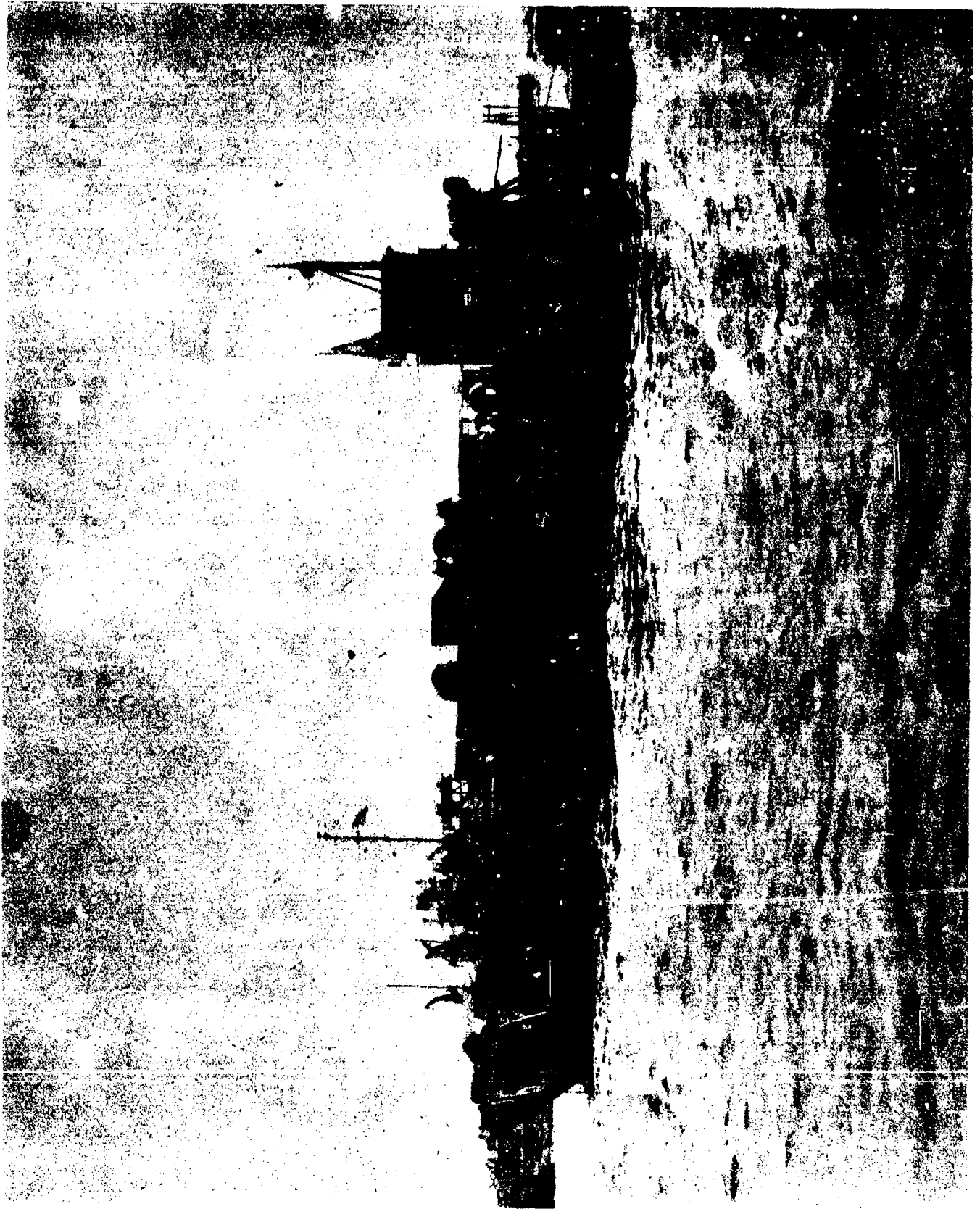
AB-CR-227-290-22. View from off port beam after Test B.

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BB-CR-227-519-13. View from off port quarter before Test B.

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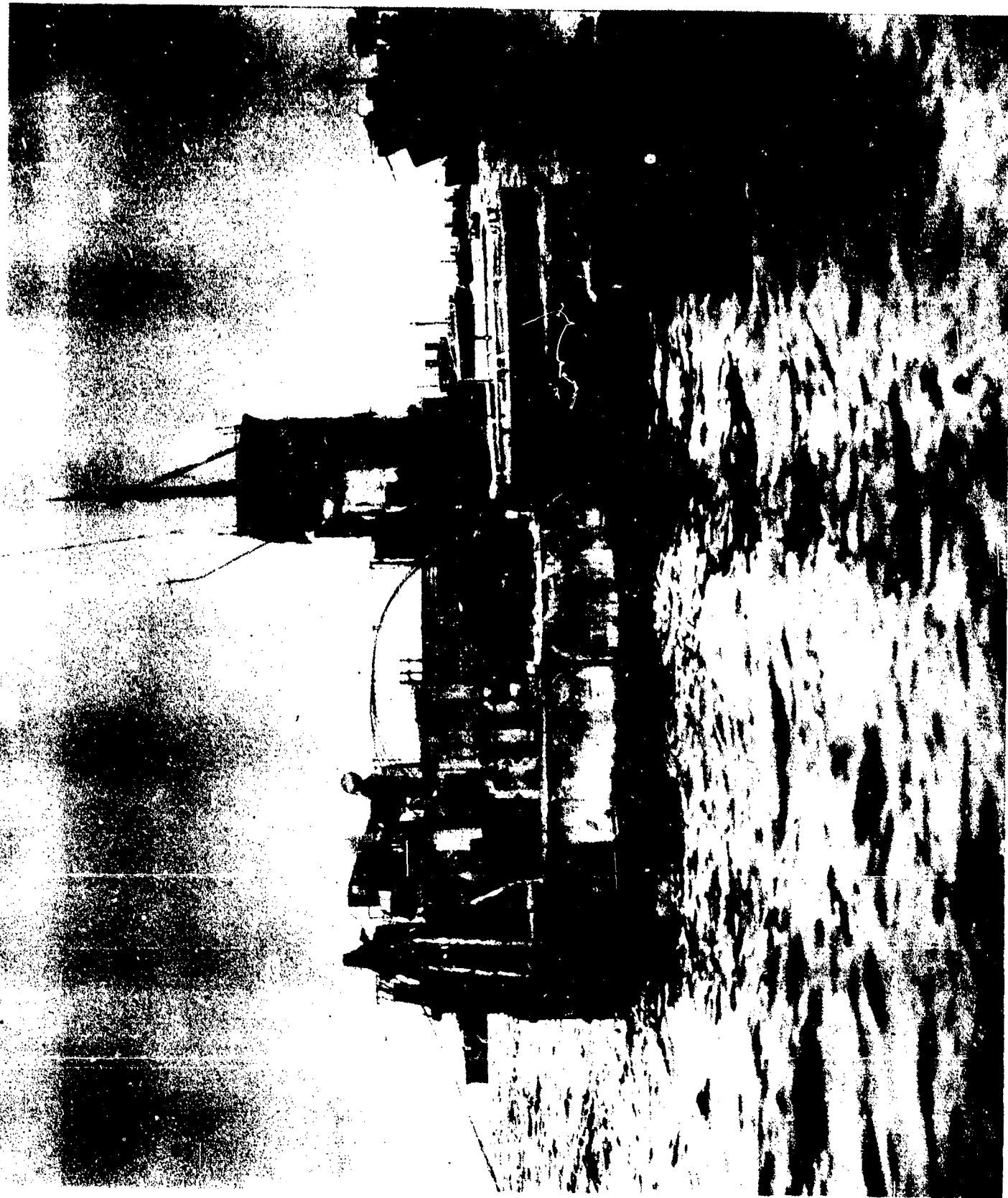
AB-CR-227-290-21. View from off port quarter after Test B.

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BB-CR-227-519-14. View from off astern before Test B.

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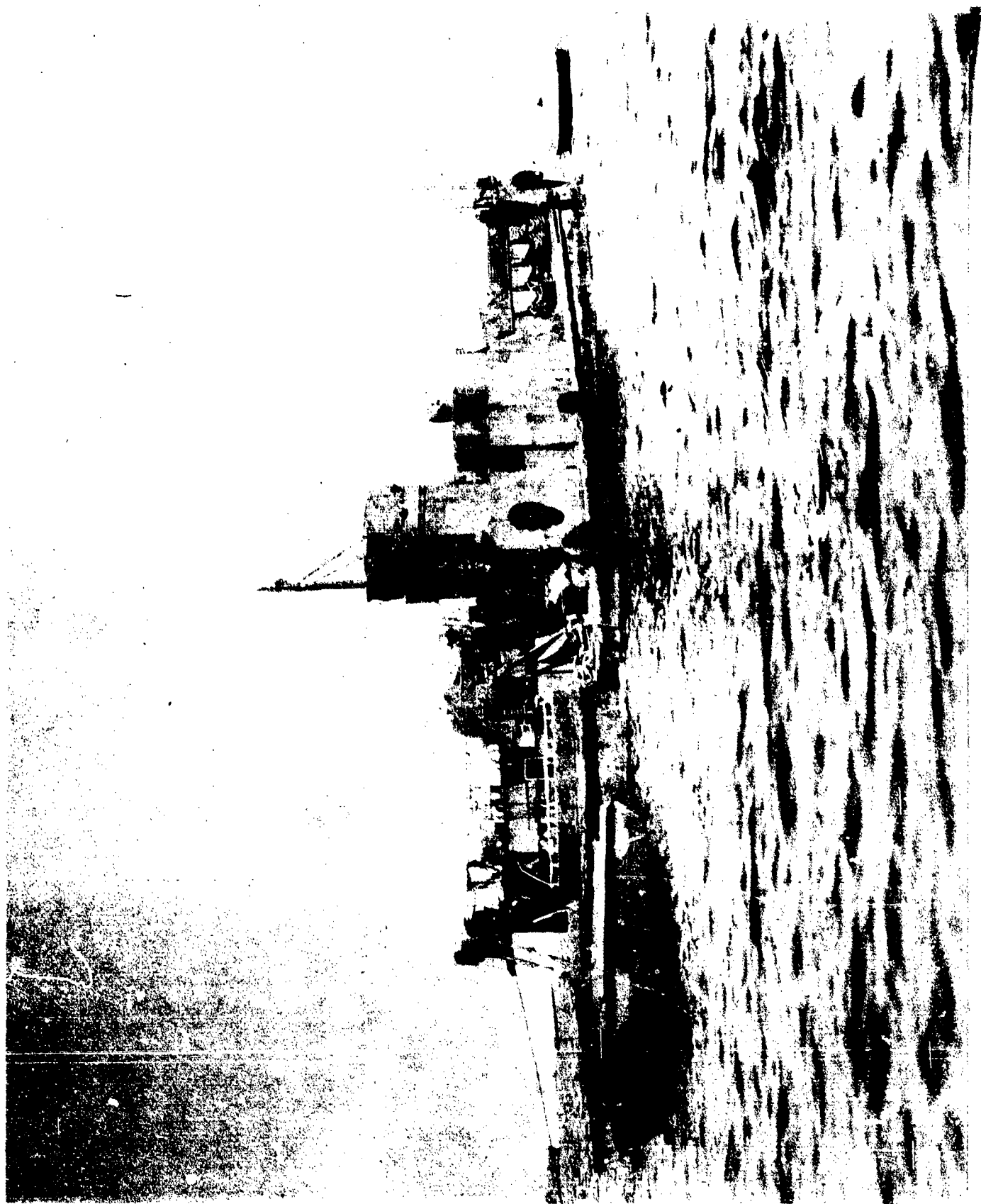
AB-CR-227-290-20. View from off astern after Test B.

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BB-CR-227-519-15. View from off starboard quarter before Test B.

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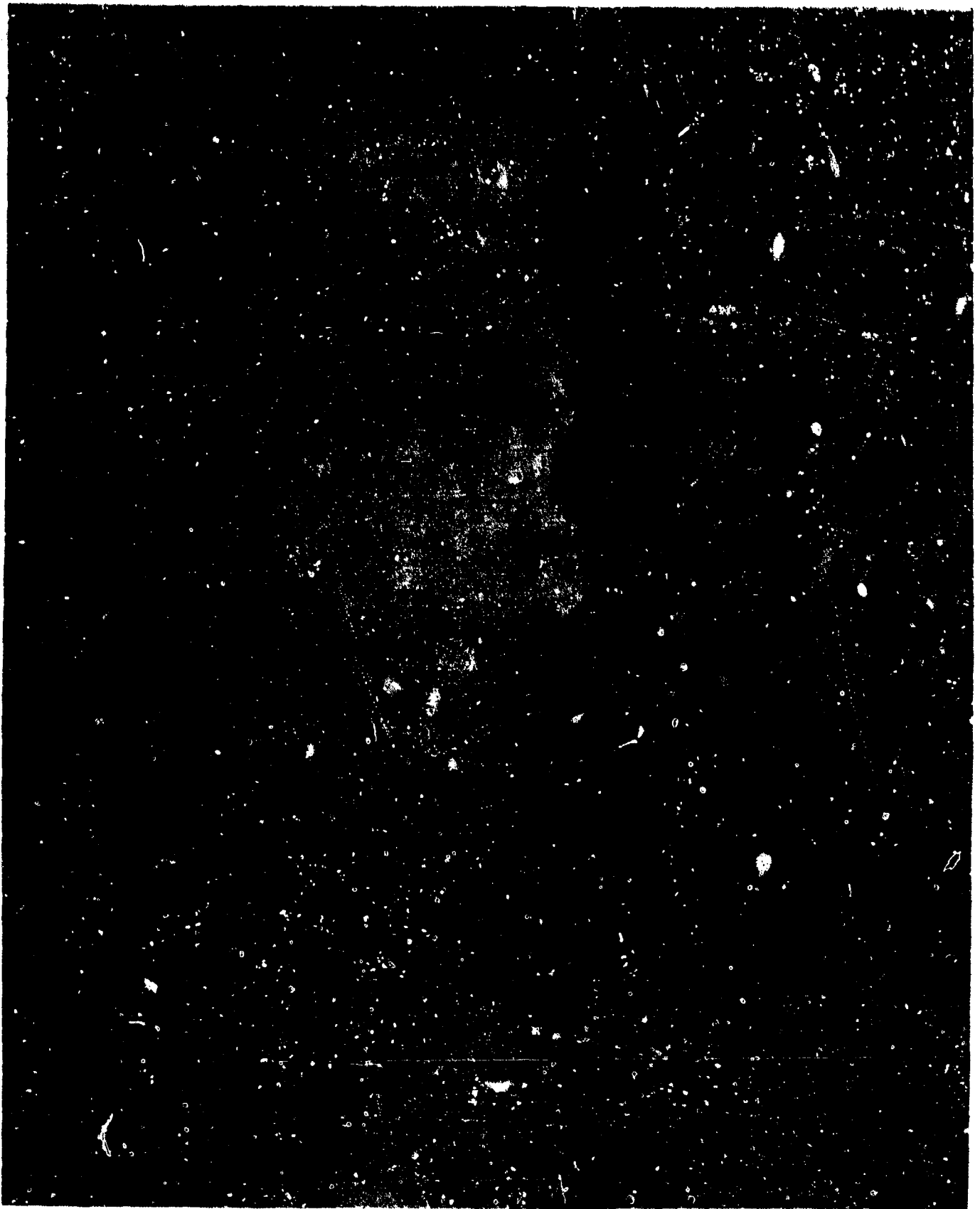
AB-CR-227-290-19. View from off starboard quarter after Test B.

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BB-CR-227-519-16. View from off starboard beam before Test B.

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AB-CR-227-290-18. View from off starboard beam after Test B.

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BB-CR-227-519-9. View from off starboard bow before Test B.

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AB-CR-227-290-17. View from off starboard bow after Test B.

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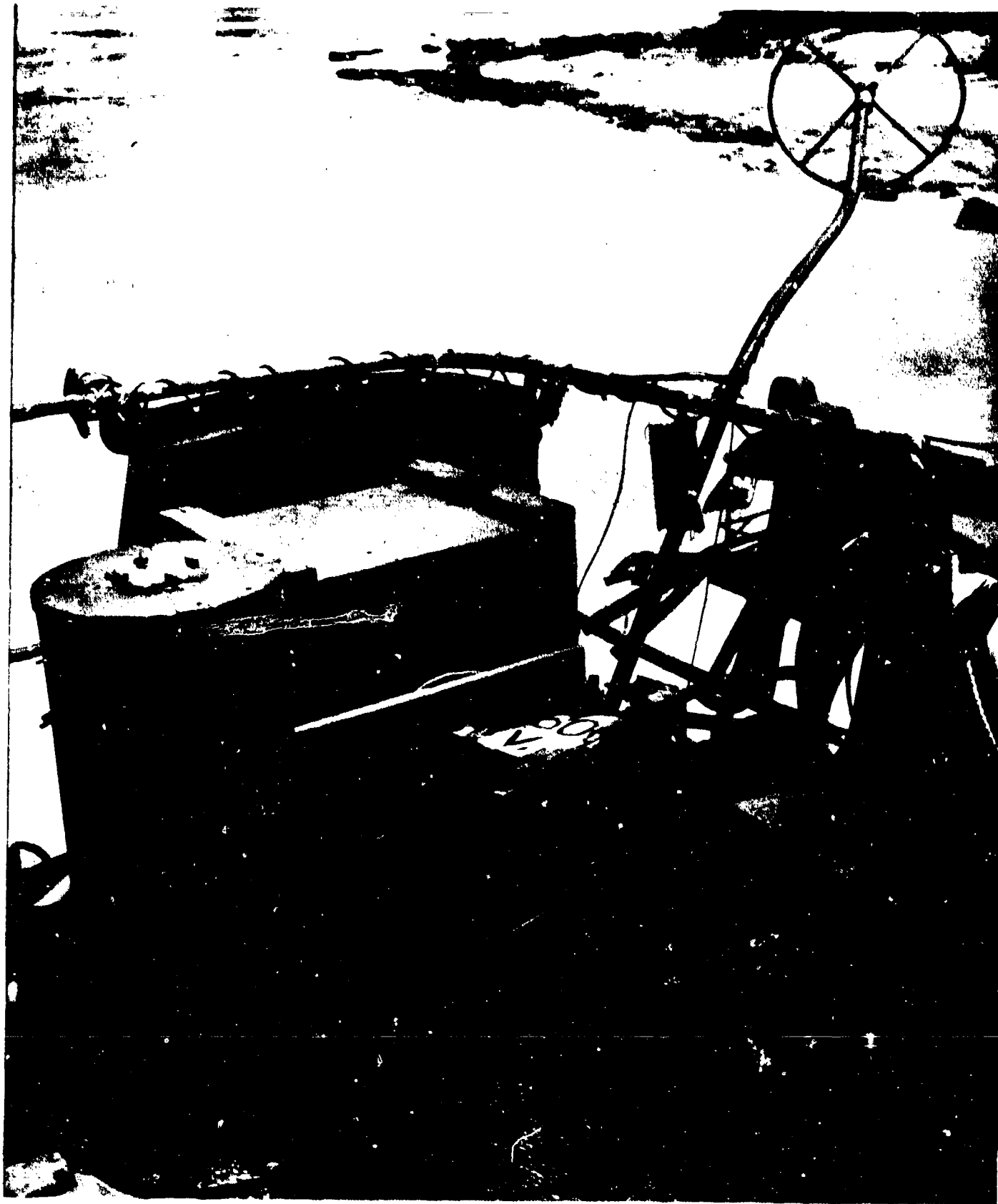
AB-CR-183-425-77. General view after test, before beaching.

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AB-CR-97-4046-9. Bent IFF antennae support.

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AB-CR-97-4046-10. Top of starboard deck house.

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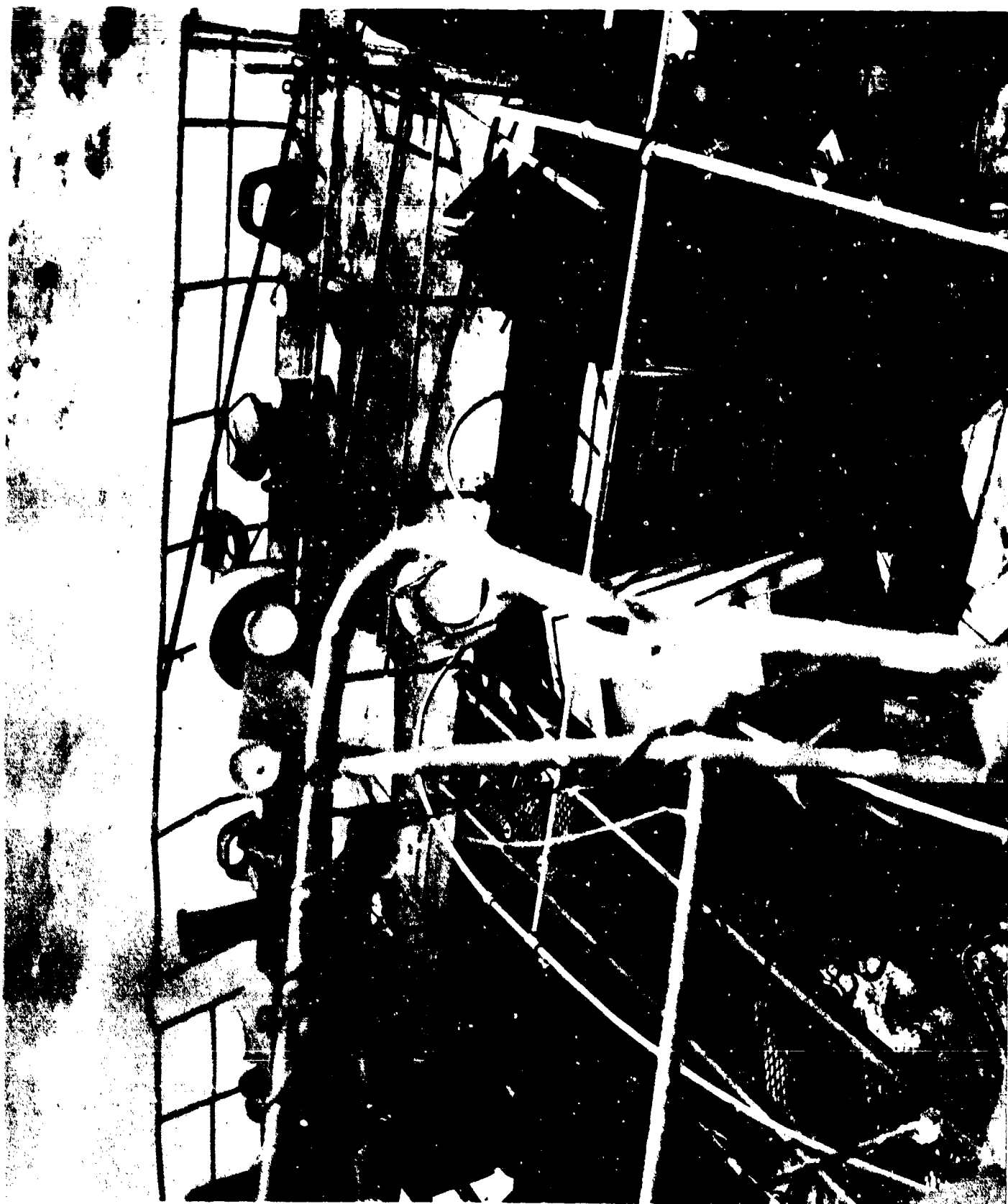
AB-CR-97-4046-11. Top of port deck house, forward section.

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AB-CR-97-4046-12. Top of port deck house, after section.

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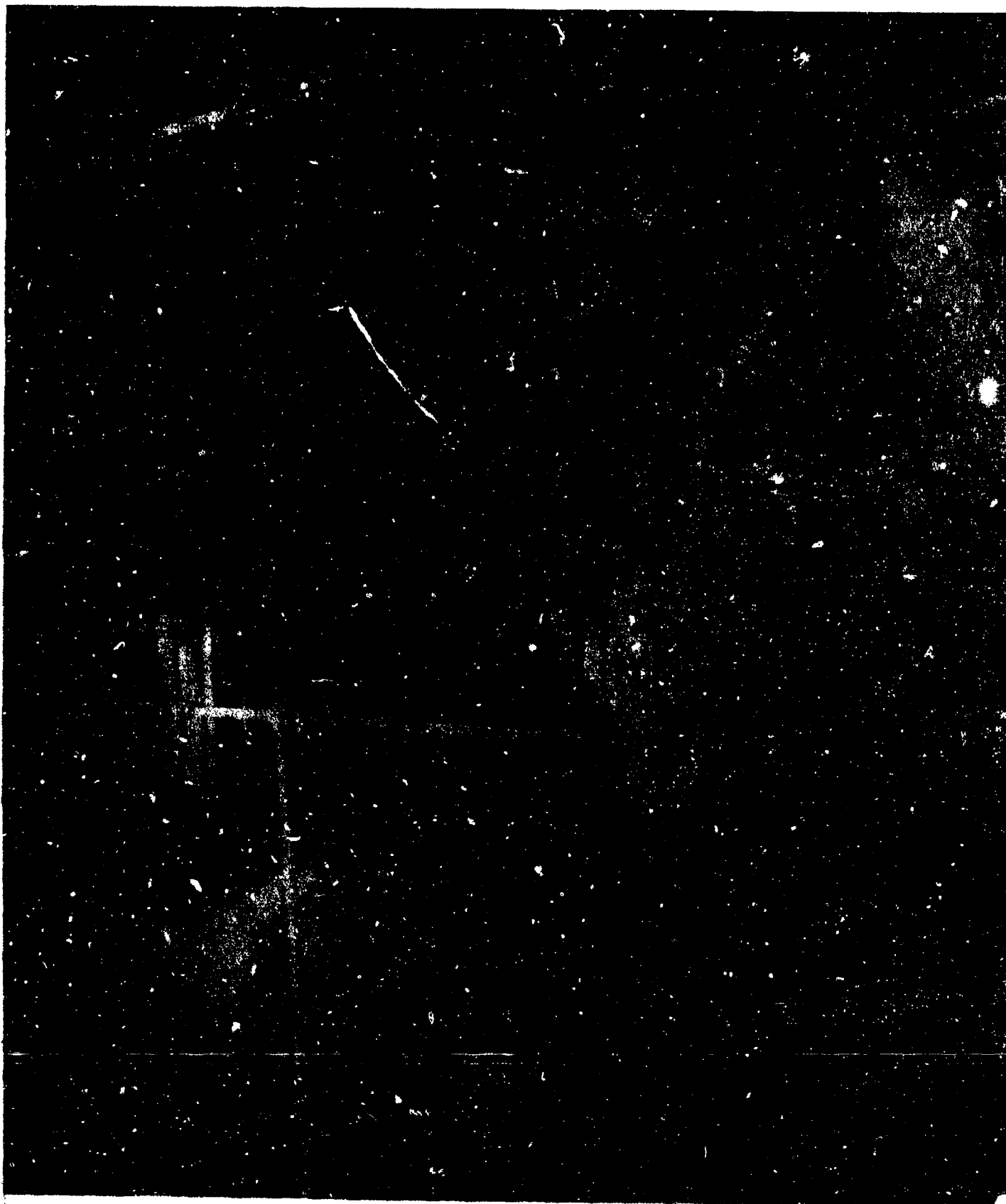


AB-CR-97-4045-2. After end of tank deck.

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AB-CR-97-4045-1. Disarranged equipment in after end of tank deck.

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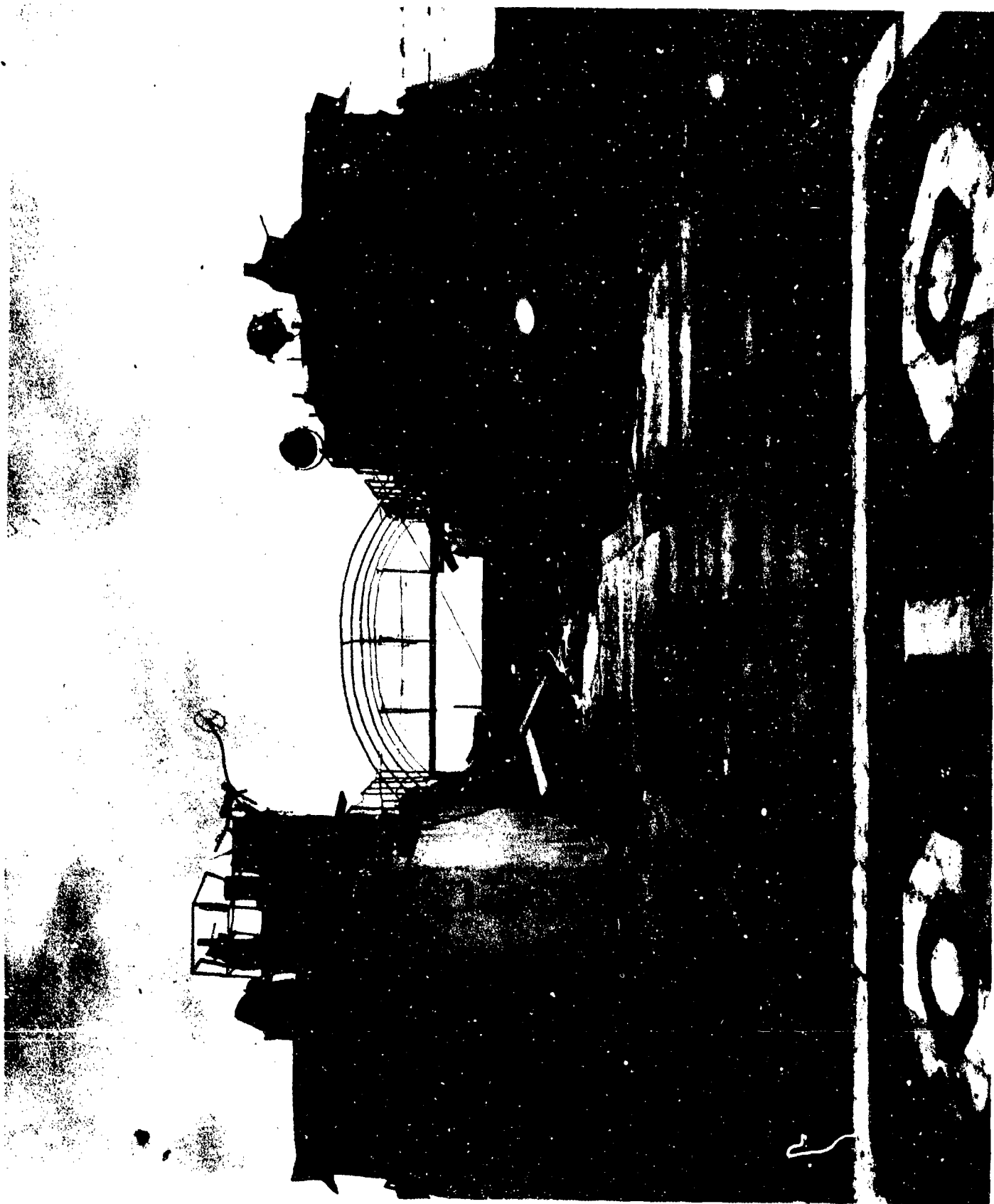
AB-CR-97-4045-4. Looking forward on tank deck.

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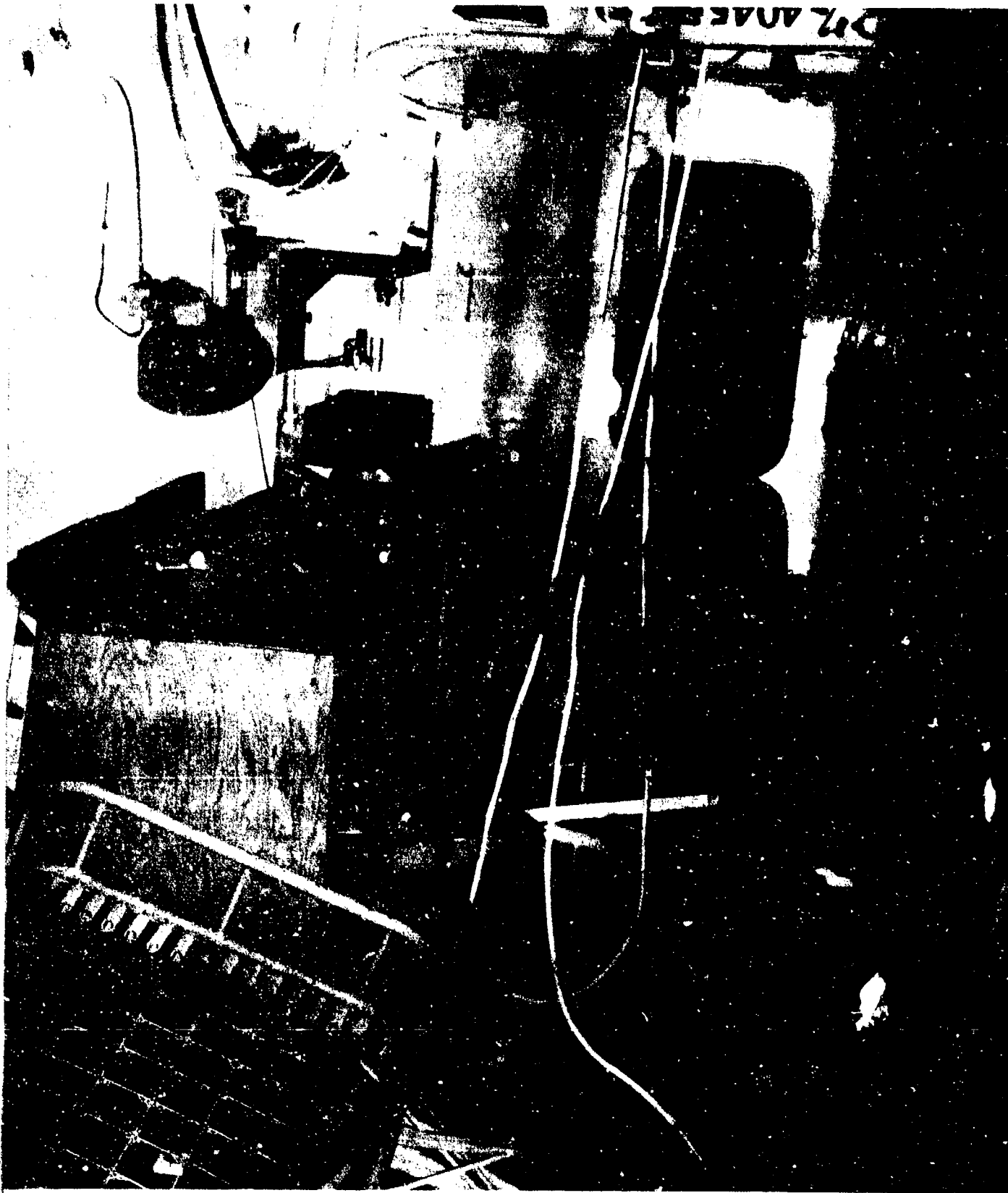
AB-CR-97-4045-5. Looking aft on tank deck.

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AB-CR-97-4045-3. Disarranged equipment in starboard crew's quarters.

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TECHNICAL INSPECTION REPORT

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, sources.

There was no flooding, hence no change in drafts or list. There was a small amount of normal seepage.

(b) Structural damage.

There is no damage to the principal structure. A stick antennae is bent; the flag bag is displaced, and the port after superstructure handrail is broken and bent.

(c) Other damage.

None.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None.

(b) Fires and explosions.

None.

(c) Shock.

None.

(d) Pressure.

A stick antennae is bent and the flag bag is displaced. The force apparently came from a relative bearing of 270 degrees.

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- (e) Effects apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

- (a) Effect on machinery, electrical, and ship control.

None.

- (b) Effect on gunnery and fire control.

None.

- (c) Effect on water-tight integrity and stability.

None.

- (d) Effect on personnel and habitability.

None.

- (e) Total effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

This ship was at too great a distance from the blast to suffer any damage in Test B.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

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TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

list. There was no flooding, hence no change in drafts or

- (b) Structural damage.

There is no damage to the principal structure. A stick antennae is bent; the flagbag is displaced; and the port after superstructure handrail is broken and bent.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

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(d) Pressure.

A stick antennae is bent and the flagbag is displaced.
The force apparently came from a relative bearing of 270 degrees.

(e) Effects peculiar to the Atomic Bomb.

None.

III. Results of Test on Target.

(a) Effect on machinery, electrical, and s p control.

No. observed.

(b) Effect on gunnery and fire control.

Not observed.

(c) Effect on watertight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary.

No comments.

V. Recommendations.

None.

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VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Minimum
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast	quired.

Details of the quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Hull Damage.

The force of the explosion either as a pressure wave or water came from the port beam. It bent a stick antennae, and the after port superstructure handrail, moved the flagbag, and tore the flagbag canvas cover.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

No data taken by machinery group.

- (b) Structural damage.

No data taken by machinery group.

- (c) Other damage.

Test "B" had no effect on machinery or ship control as far as could be determined by visual inspection.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

No evidence.

- (d) Pressure.

No evidence.

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- (e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

- (a) Effects on machinery and ship control.

There was no damage.

- (b) Effects on gunnery and fire control.

No comment.

- (c) Effect on water-tight integrity and stability.

No comment.

- (d) Effect on personnel and habitability.

Test "B" had no effect on personnel and habitability other than the possible effect of radioactivity.

- (e) Total effect on fighting efficiency.

Test "B" had no effect on fighting efficiency other than the possible effect of radioactivity.

IV. General Summary of Observers' Impressions and Conclusions.

The vessel was outside the effective range of physical damage of the explosion from Test "B". No comment is offered here as to the effect of radioactivity.

V. Any Preliminary General or Specific Recommendations of the Inspection Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Not observed.

- (b) Structural damage.

Not observed.

- (c) Other damage.

The electrical equipment suffered no apparent damage or loss of operability, either directly or indirectly due to the Atom Bomb. None of the electrical equipment had been operated at the time of inspection as the ship's crew had not returned.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

None.

- (c) Shock.

There was no evidence of shock damage.

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(d) Pressure.

There was no evidence of pressure damage.

(e) Any effects apparently peculiar to the Atom Bomb.

None other than radioactivity.

III. Effects of Damage.

(a) Effect on propulsion and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on watertight integrity and stability.

Not observed.

(d) Effect on personnel and habitability.

None other than due to radioactivity.

(e) Effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

From an electrical standpoint this ship was at too great a distance from the blast to suffer any damage in Test "B".

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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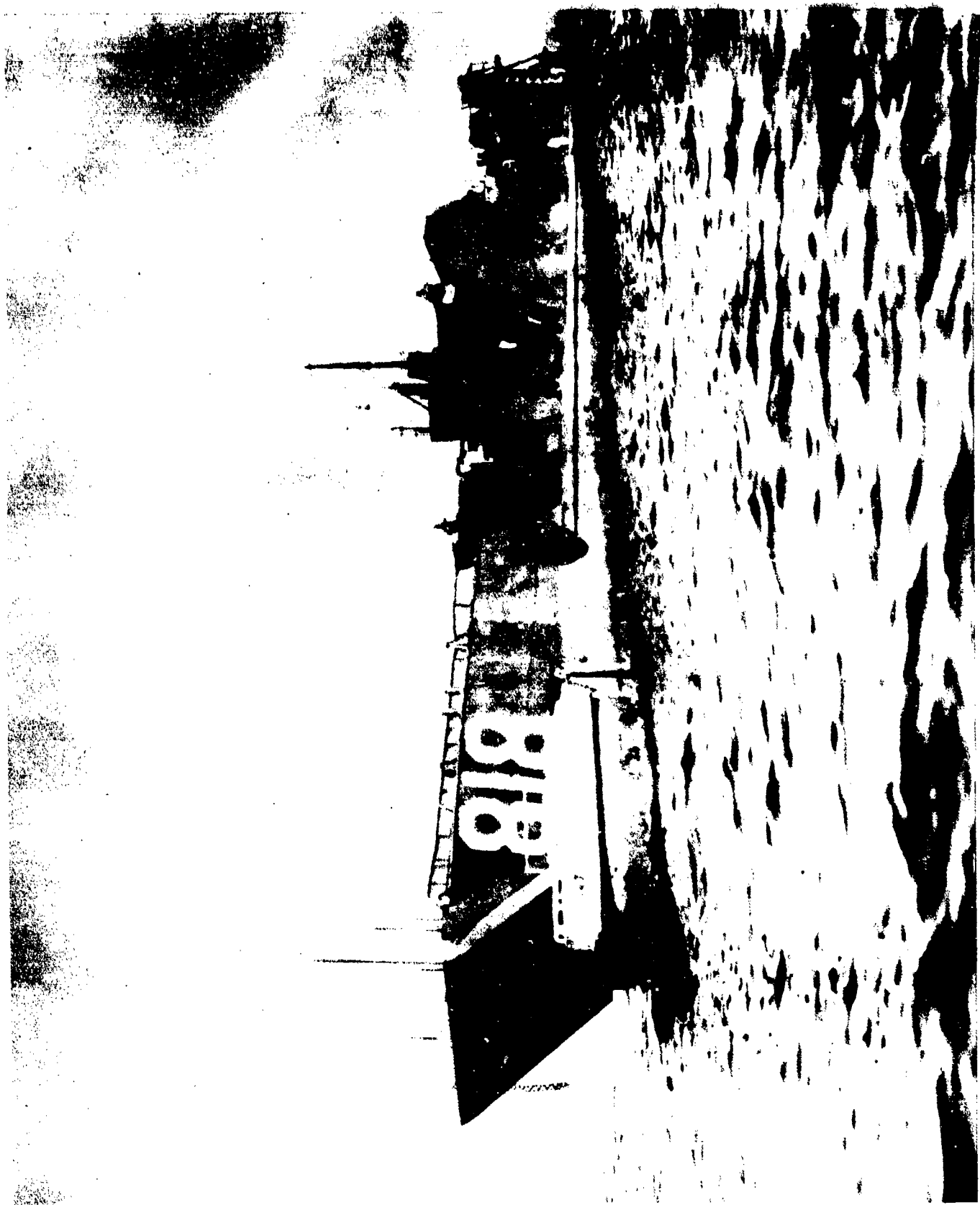
APPENDIX

PHOTOGRAPHS

TEST BAKER

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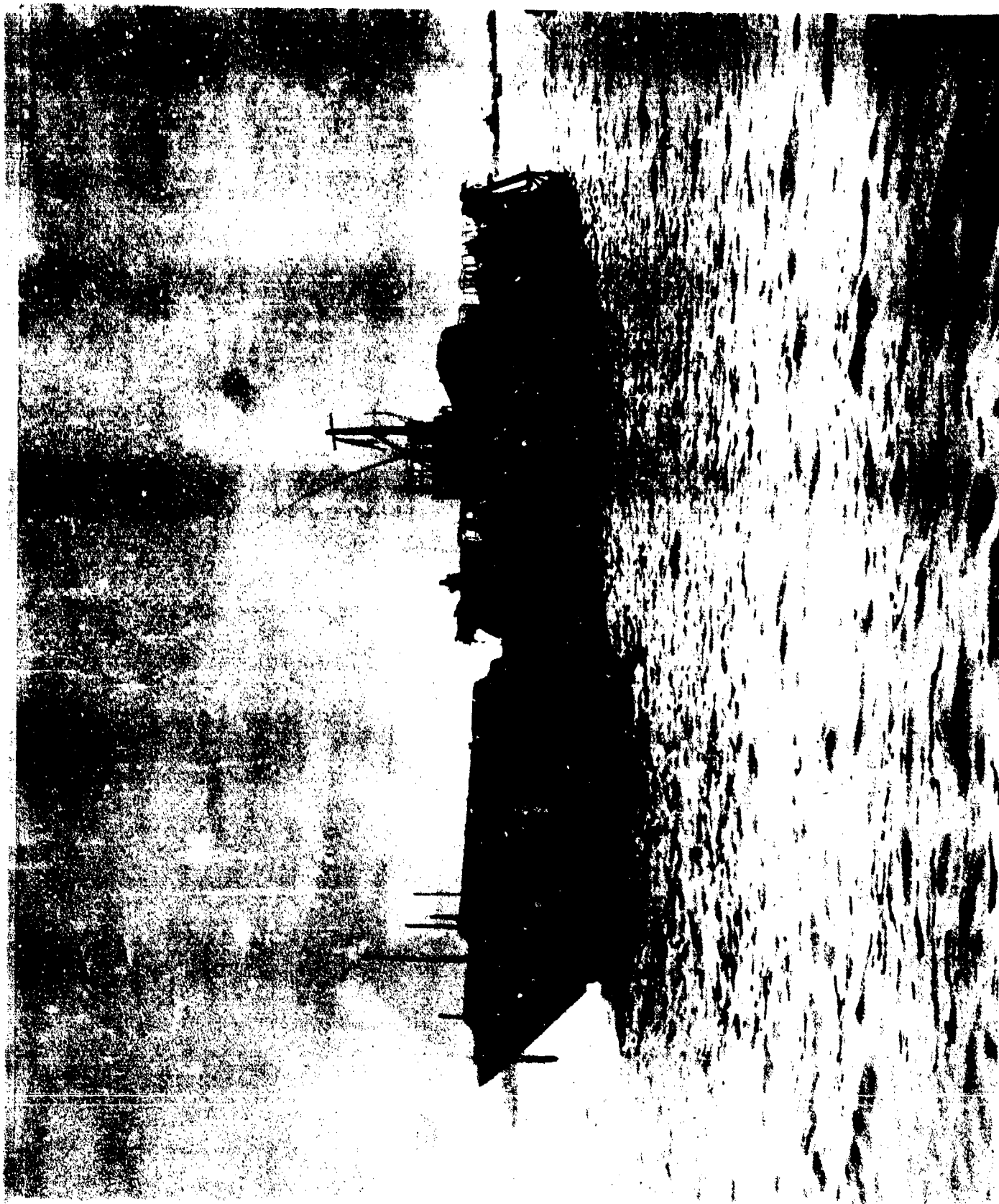
BB-CR-227-519-106. View from port bow before Test B.

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AB-CR-227-290-2. View from port bow after Test B.

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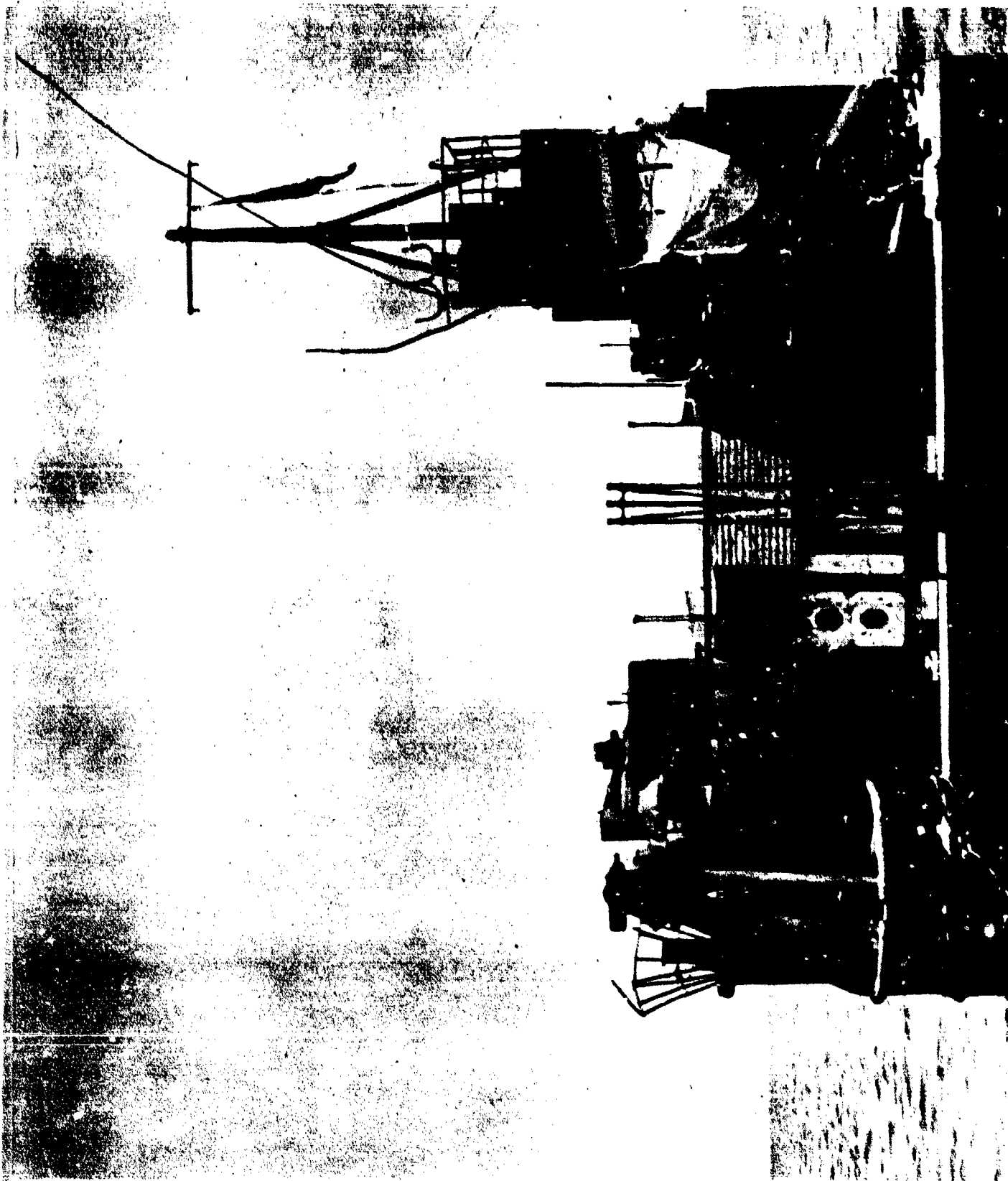
EB-CR-227-519-109. View from stern before Test B.

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AB-CR-227-290-5. View from astern after Test B.

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TECHNICAL INSPECTION REPORT

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

- (a) Drafts after test, list, general areas of flooding, sources.

There was no flooding, hence no change in draft or list.

- (b) Structural damage.

No damage.

- (c) Other damage.

None.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

- (e) Effects apparently peculiar to the atom bomb.

None.

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III. Effects of Damage.

(a) Effect on machinery, electrical, and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on water-tight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Total effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

This ship was beyond the range of damage.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

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USS LCT 874

TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

list. There was no flooding, hence no change in draft or

- (b) Structural damage.

No damage.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

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(e) Effects peculiar to the Atomic Bomb.

None.

III. Results of Test on Target.

(a) Effect on machinery, electrical and ship control.

Not observed.

(b) Effect on gunnery and fire control.

Not observed.

(c) Effect on watertight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary.

No comment.

V. Recommendations.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Minimum

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ITEM	LOADING
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast	quired.

Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

No data taken by machinery group.

- (b) Structural damage.

No data taken by machinery group.

- (c) Other damage.

Test "B" had no effect on machinery or ship control as far as could be determined by visual inspection.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

No evidence.

- (d) Pressure.

No evidence.

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- (e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

- (a) Effects on machinery and ship control.

There was no damage.

- (b) Effects on gunnery and fire control.

No comment.

- (c) Effect on water-tight integrity and stability.

No comment.

- (d) Effect on personnel and habitability.

Test "B" had no effect on personnel and habitability other than the possible effect of radioactivity.

- (e) Total effect on fighting efficiency.

Test "B" had no effect on fighting efficiency other than the possible effect of radioactivity.

IV. General Summary of Observers' Impressions and Conclusions.

The vessel was outside the effective range of physical damage of the explosion from Test "B". No comment is offered here as to the effect of radioactivity.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Not observed.

- (b) Structural damage.

Not observed.

- (c) Other damage.

The electrical equipment suffered no apparent damage or loss of operability, either directly or indirectly due to the Atom Bomb. None of the electrical equipment had been operated at the time of inspection as the ship's crew had not returned.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

None.

- (c) Shock.

There was no evidence of shock damage.

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(d) Pressure.

There was no evidence of pressure damage.

(e) Any effects apparently peculiar to the Atom Bomb.

None other than radioactivity.

III. Effects of Damage.

(a) Effect on propulsion and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on watertight integrity and stability.

Not observed.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

This ship was beyond the range of damage to electrical equipment in Test "B".

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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APPENDIX

PHOTOGRAPHS

TEST BAKER

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AB-CR-227-290-110. View from starboard beam after Test B.

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

There was no flooding, hence no change in drafts or list. There was a small amount of normal leakage through stern tubes.

- (b) Structural damage.

No damage.

- (c) Other damage.

None.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

- (e) Effects apparently peculiar to the atom bomb.

None.

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III. Effects of Damage.

(a) Effect on machinery, electrical, and ship control.

Although operability tests were not conducted, all machinery and electrical equipment and ships control were apparently unaffected by this test.

(b) Effect on gunnery and fire control.

Gunnery and fire control were unaffected.

(c) Effect on water-tight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Total effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

The distance of this vessel from the blast was too great for damage to occur.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

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TECHNICAL INSPECTION REPORT

SECTION II - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

There was no flooding, hence no change in drafts or list. There was a small amount of normal leakage through stern tubes.

- (b) Structural damage.

No damage.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

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(e) Effects peculiar to the Atomic Bomb.

None.

III. Results of Test on Target.

(a) Effect on machinery, electrical, and ship control.

Not observed.

(b) Effect on gunnery and fire control.

Not observed.

(c) Effect on watertight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary.

No comment.

V. Recommendations.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Minimum

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ITEM	LOADING
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast	quired.

Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

L. Flooding.

There is 6" of oil and water in the engine spaces. The after centerline was sounded and contained 18" of water. No other tanks were opened but the drafts indicate that one or more of the forward tanks may be flooded. The after tanks were flooded prior to test "B" and the forward tanks probably flooded through previous grounding damage. It is considered that the test was in no way responsible for the flooding on this craft.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

No data taken by the machinery group except that the engine room was flooded to a depth of 9" above the floor plates. This flooding was the result of normal seepage through the stern tubes and would have been controlled had the crew been aboard.

- (b) Structural damage.

No data taken by the machinery group.

- (c) Other damage.

Test "B" had no effect on machinery or ship control as far as could be determined from visual inspection.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

There was no evidence of shock as far as could be determined by visual inspection.

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(d) Pressure.

There was no evidence of pressure effect on machinery as far as could be determined by visual inspection.

(e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

(a) Effect on machinery and ship control.

Test "B" had no effect on machinery and ship control as far as could be determined by visual inspection.

(b) Effect on gunnery and fire control.

No comment.

(c) Effect on water-tight integrity and stability.

No comment.

(d) Effect on personnel and habitability.

Test "B" had no effect on personnel and habitability other than the effect of radioactivity.

(e) Total effect on fighting efficiency.

Test "B" had no effect on fighting efficiency except for radioactivity.

IV. General Summary of Observers' Impressions and Conclusions.

The machinery of this vessel was not affected by Test "B". No comment is offered here as to the effects of radioactivity.

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V. Any Preliminary General or Specific Recommendations of the
Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Machinery Damage.

(a) Overall condition.

Due to the flooded condition of the engine rooms the vessel is without propulsion power and current for operation of electrical equipment.

(b) Areas of major damage.

The main machinery spaces were flooded.

(c) Primary causes of damage.

Flooding caused by normal seepage of water through the stern tubes.

(d) Effect of target test on overall operation of the machinery plant.

There was no direct effect of the target test on the overall operation of the machinery plant as far as could be determined by visual inspection.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Drafts or list were not observed. Engine rooms had 6 inches of water above the floor plates due to normal leakage while the vessel was abandoned.

- (b) Structural damage.

No structural damage observed which affected electrical equipment.

- (c) Other damage.

No electrical damage occurred as a result of test "B".

II. Forces Evidenced and Effects Noted.

- (a) Heat.

There was no evidence of heat.

- (b) Fires and explosions.

There was no evidence of fires or explosions.

- (c) Shock.

There was no evidence of shock to electrical equipment.

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(d) Pressure.

There was no evidence of pressure on electrical equipment.

(e) Any effects apparently peculiar to the Atomic Bomb.

There were no effects noted that are considered peculiar to the Atomic Bomb other than radioactivity.

III. Effects of Damage.

(a) Effect on electrical equipment and ship control.

Although operability tests were not conducted, all electrical equipment and ships control were apparently unaffected by this test.

(b) Effect on gunnery and fire control.

Gunnery and fire control were unaffected electrically.

(c) Effect on water-tight integrity and stability.

None.

(d) Effect on personnel and habitability.

It is considered the only effect on personnel and habitability would have been that due radioactivity.

(e) Total effect on the fighting efficiency.

There was no effect on the fighting efficiency of this vessel as a result of test "B" from electrical failures. It is considered that except for possible personnel casualties due to radioactivity this vessel's fighting efficiency would have been unimpaired.

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IV. General Summary of Observer's Impressions and Conclusions.

The distance of this vessel from the blast was too great for electrical damage to occur.

V. Any Preliminary, General or Specific Recommendations of the Inspection Group.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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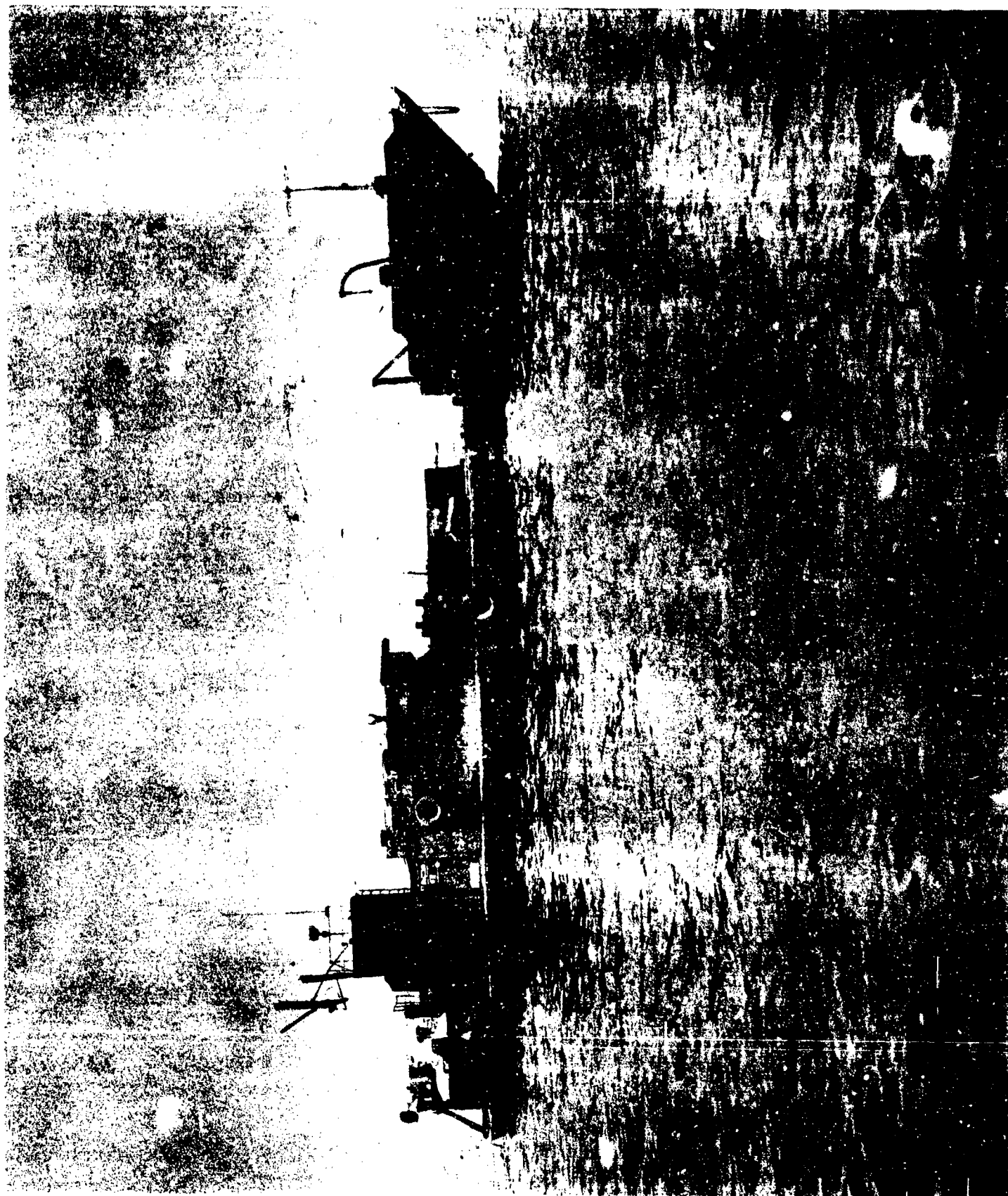
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AB-CR-227-283-88. View from starboard beam after Test B.

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

(a) Drafts after test, general areas of flooding, sources.

There was no flooding, hence no change in drafts or list.

(b) Structural damage.

No damage.

(c) Other damage.

The electrical and machinery equipment suffered no apparent damage.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None.

(b) Fires and explosions.

None.

(c) Shock.

None.

(d) Pressure.

None.

(e) Effects peculiar to the Atomic Bomb.

None.

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III. Results of Test on Target.

(a) Effect on machinery, electrical, and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on watertight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary.

This ship was beyond the range of damage.

V. Recommendations.

None.

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TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

There was no flooding, hence no change in drafts or list.

- (b) Structural damage.

No damage.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

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(e) Effects peculiar to the Atomic Bomb.

None.

III. Results of Test on Target.

(a) Effect on machinery, electrical, and ship control.

Not observed.

(b) Effect on gunnery and fire control.

Not observed.

(c) Effect on watertight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary.

No comments.

V. Recommendations.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Minimum

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ITEM	LOADING
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast	quired.

Details of the actual quantities of the various items are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY D

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

No data taken by machinery group.

- (b) Structural damage.

No data taken by machinery group.

- (c) Other damage.

Test "B" had no effect on machinery or ship control as far as could be determined by visual inspection.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

No evidence.

- (d) Pressure.

No evidence.

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- (e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

- (a) Effects on machine and ship control.

There was no damage.

- (b) Effects on gunnery and fire control.

No comment.

- (c) Effect on water-tight integrity and stability.

No comment.

- (d) Effect on personnel and habitability.

Test "B" had no effect on personnel and habitability other than the possible effect of radioactivity.

- (e) Total effect on fighting efficiency.

Test "B" had no effect on fighting efficiency other than the possible effect of radioactivity.

IV. General Summary of Observers' Impressions and Conclusions.

The vessel was outside the effective range of physical damage of the explosion from Test "B". No comment is offered here as to the effect of radioactivity.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Not observed.

- (b) Structural damage.

Not observed.

- (c) Other damage.

The electrical equipment suffered no apparent damage or loss of operability, either directly or indirectly due to the Atom Bomb. None of the electrical equipment had been operated at the time of inspection as the ship's crew had not returned.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

None.

- (c) Shock.

There was no evidence of shock damage due to Test "B".

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(d) Pressure.

There was no evidence of pressure damage.

(e) Any effects apparently peculiar to the Atom Bomb.

None other than radioactivity.

III. Effects of Damage.

(a) Effect on propulsion and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on watertight integrity and stability.

Not observed.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

This ship was beyond the range of damage to its electrical equipment in Test "B".

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Electrical Damage.

(a) Overall condition.

No visible damage to electrical equipment.

(b) Areas of major damage.

None.

(c) Primary causes of damage in each area of major damage.

None.

(d) Effect of target test on overall operation of electric plant.

The operability of the electric plant apparently was not impaired by any direct or indirect effects of the atom bomb. However, none of the equipment was operated as the ship's crew had not returned. Several minor electrical items apparently had been cannibalized after Test "A".

(e) Types of equipment most affected.

None. A starting solenoid was displaced near the starboard propulsion engine and a light in the starboard engine space was shattered. These are believed to have occurred after Test "A".

L. Lighting Equipment.

The only damage noted was one shattered light bulb in

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the starboard engine space. It is believed that this was caused while the ship was cannabalized after Test "A".

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PHOTOGRAPHS

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AB-CR-227-290-102. View from starboard beam after 'Test B.

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OVERALL SUMMARY

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, source

There was no flooding, hence no change in drafts or list.

(b) Structural damage.

No damage.

(c) Other damage.

The electrical and machinery equipment suffered no damage or loss of operability, either directly or indirectly due to the atom bomb. The two ship's service generators were started and operated with load on the lighting system and ship's service system.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None.

(b) Fires and explosions.

None.

(c) Shock.

None.

(d) Pressure.

None.

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(e) Effects apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

(a) Effect on machinery, electrical, and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on water-tight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Total effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

This ship was beyond the range of damage, in
Test B.

V. Preliminary General or Specific Recommendations of
Inspection Group.

None.

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TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

list. There was no flooding, hence no change in drafts or

- (b) Structural damage.

None.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

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- (e) Effects peculiar to the Atomic Bomb.

None.

III. Results of Test on Target.

- (a) Effect on machinery, electrical, and ship control.

Not observed.

- (b) Effect on gunnery and fire control.

Not observed.

- (c) Effect on watertight integrity and stability.

None.

- (d) Effect on personnel and habitability.

None.

- (e) Effect on fighting efficiency.

None.

IV. General Summary.

No comment.

V. Recommendations.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Reduce to a minimum.

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ITEM	LOADING
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast.	quired.

Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

No data taken by machinery group.

- (b) Structural damage.

No data taken by machinery group.

- (c) Other damage.

Test "B" had no effect on machinery or ship control.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

No evidence.

- (d) Pressure.

No evidence.

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- (e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

- (a) Effects on machinery and ship control.

There was no damage.

- (b) Effect on gunnery and fire control.

No comment.

- (c) Effect on water-tight integrity and stability.

No comment.

- (d) Effect on personnel and habitability.

Test "B" had no effect on personnel and habitability other than the effect of radioactivity.

- (e) Total effect on fighting efficiency.

Test "B" had no effect on fighting efficiency other than radioactivity.

IV. General Summary of Observers' Impressions and Conclusions.

The vessel was outside the effective range of physical damage from the explosion of Test "B". No comment is offered here as to the effect of radioactivity.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Machinery Damage.

All machinery was visually inspected and appears to be undamaged, however the two diesel generators were operated for about 15 minutes, all three main engines were turned over with their starters and the two motor driven exhaust ventilation fans were started, they all operated satisfactorily.

(a) Overall condition.

The overall condition of this vessel is such that it is believed it could be put in operation within a few hours.

(b) Areas of major damage.

None.

(c) Primary cause of damage.

None.

(d) Effect of target test on overall operation of machinery plant.

Since no damage was sustained there is no known effect of the test on the overall operation of the machinery plant.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Not observed.

- (b) Structural damage.

Not observed.

- (c) Other damage.

The electrical equipment suffered no damage or loss of operability, either directly or indirectly due to the atom bomb. The two ship's service generators were started and operated with load on the lighting system and ship's service system.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

None.

- (c) Shock.

There was no evidence of shock damage.

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(d) Pressure.

There was no evidence of pressure damage.

(e) Any effects apparently peculiar to the Atom Bomb.

None other than radioactivity.

III. Effects of Damage.

(a) Effect on propulsion and ship control.

None.

(b) Effect on gunnery and fire control.

None.

(c) Effect on watertight integrity and stability.

Not observed.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

This ship was beyond the range of damage to its electrical equipment in Test "B".

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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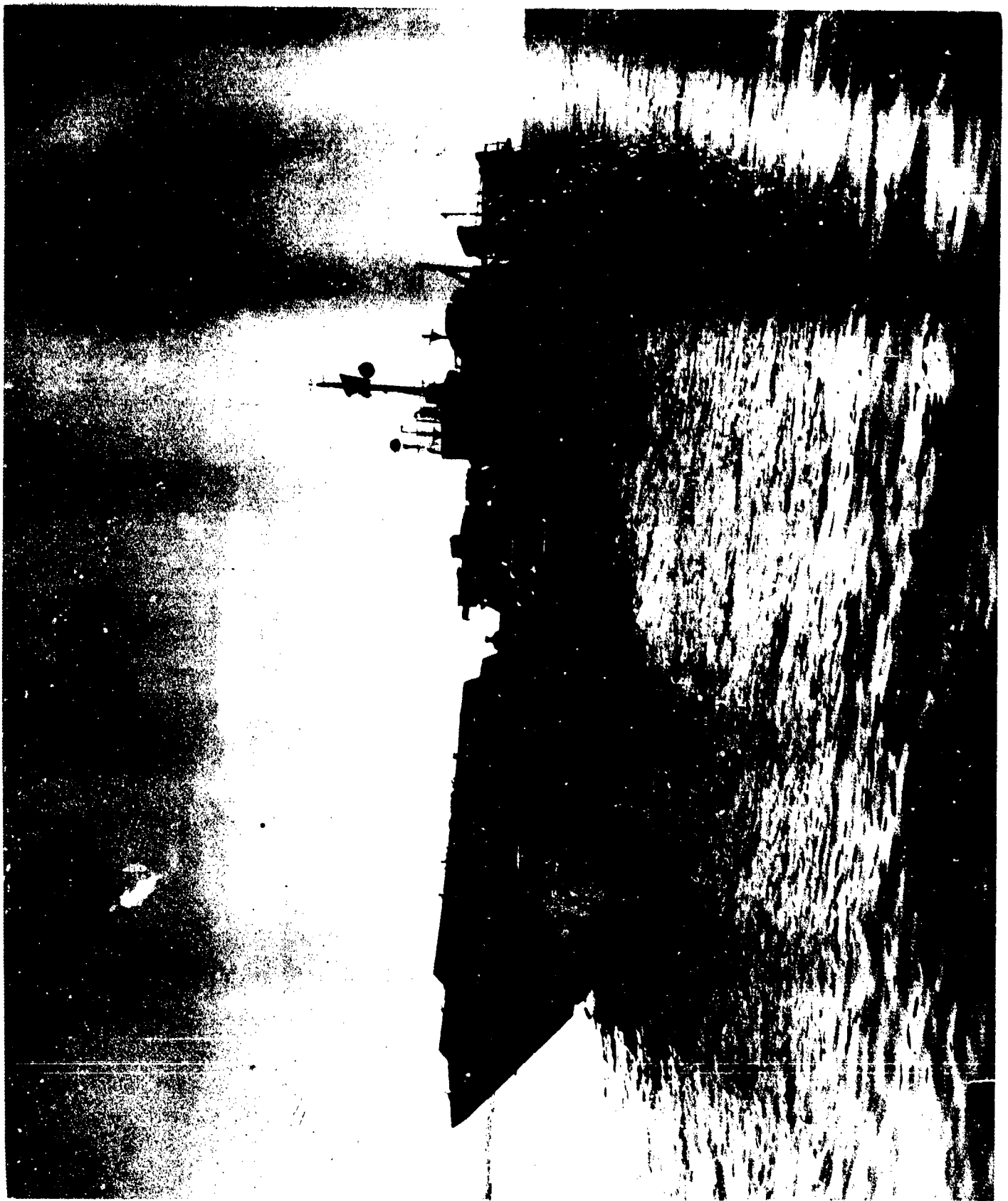
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PHOTOGRAPHS

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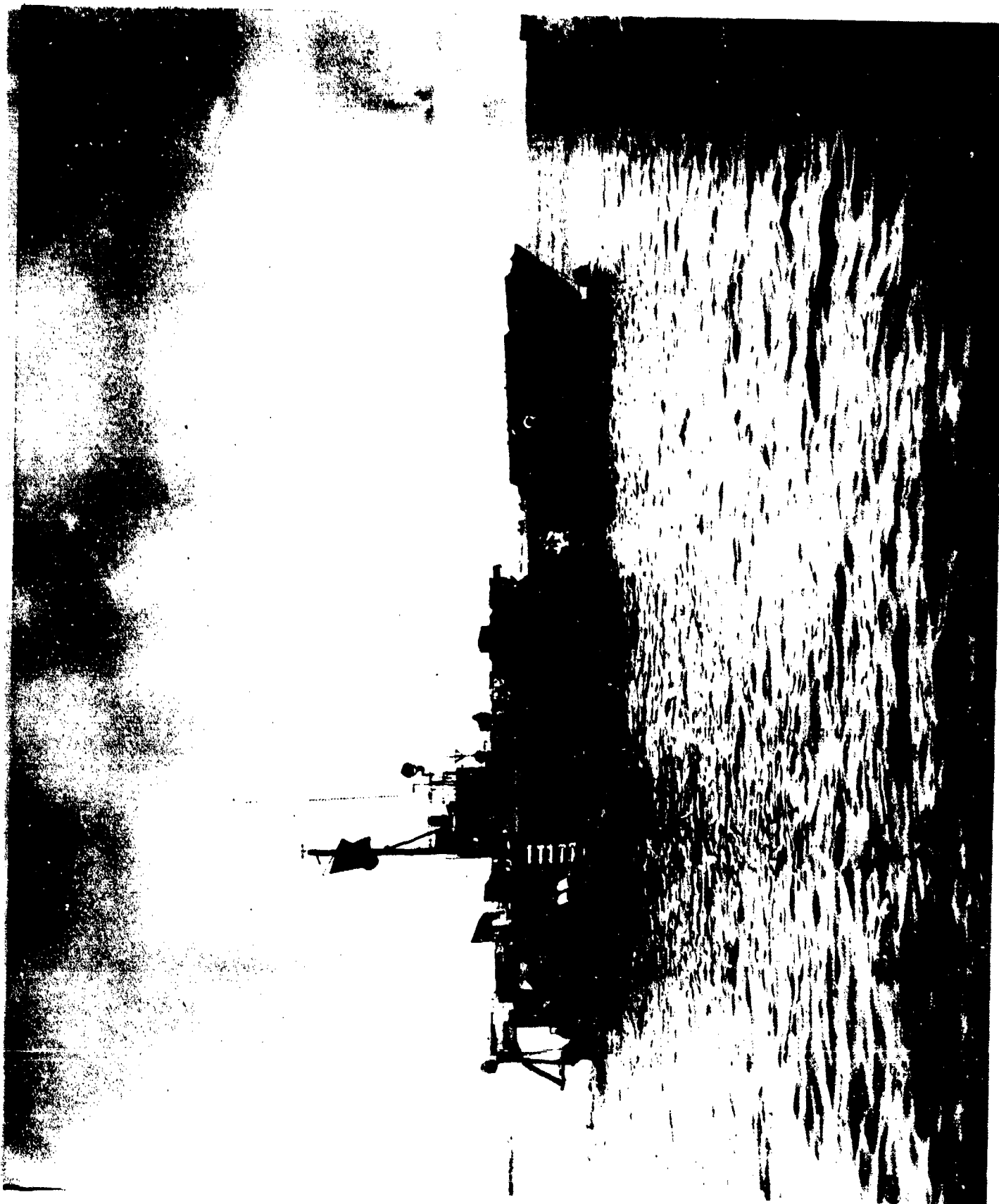
AB-CR-97-2121-11. View from port bow after Test B.

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AB-CR-97-2122-1. View from starboard quarter after Test B.

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, sources.

The engine room had 6-inches of water from normal seepage through stern tubes at a rate of about 3 inches a day. The steering gear compartment was 95% flooded through the rudder glands. The centerline tanks forward of the crews quarters had 1 to 3 inches of water. The port tank just forward of the crews quarters had 12 inches of water. Water in these tanks came from unknown sources.

Flooding is not considered the result of the test. There is no appreciable change in list and trim.

(b) Structural damage.

None.

(c) Other damage.

The electrical equipment suffered no apparent damage or loss of operability, either directly or indirectly due to the atom bomb. None of the electrical equipment had been operated at the time of inspection as the ship's crew had not returned. Although the water in the machinery spaces was not in contact with electrical equipment, some of this equipment undoubtedly is inoperable due to moisture grounds.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None.

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(b) Fires and explosions.

None.

(c) Shock.

None.

(d) Pressure.

None.

(e) Effects apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

(a) Effect on machinery, electrical, and ship control.

None other than due to possible moisture grounds.

(b) Effect on gunnery and fire control.

None.

(c) Effect on water-tight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Total Effect on fighting efficiency.

None other than due to possible moisture grounds.

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IV. General Summary of Observers' Impressions and Conclusions.

This ship was beyond the range of damage to equipment in Test B.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

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TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

The engine room had 6 inches of water from normal seepage through stern tubes at a rate of about 3 inches a day. The steering gear compartment was 95% flooded through the rudder glands. The centerline tanks forward of the crews quarters had 1 to 3 inches of water. The port tank just forward of the crews quarters had 12 inches of water. Water in these tanks came from unknown sources.

Flooding is not considered the result of the test. There is no appreciable change in list and trim.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

- (d) Pressure.

None.

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(e) Effects peculiar to the Atomic Bomb.

None.

III. Results of Test on Target.

(a) Effect on machinery, electrical, and ship control.

Not observed.

(b) Effect on gunnery and fire control.

Not observed.

(c) Effect on watertight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary.

No comment.

V. Recommendations.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Minimum

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ITEM	LOADING
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast	quired.

Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

L. Flooding.

The engine room had 6 inches of water from normal seepage through stern tubes at a rate of about 3 inches a day. The steering gear compartment was 95% flooded through the rudder glands. The centerline tanks forward of the crews quarters had 1 to 3 inches of water. The port tank just forward of the crews quarters had 12 inches of water. Water in these tanks came from unknown sources.

Flooding is not considered the result of the test. There is no appreciable change in list and trim.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

No data taken by the machinery group except that the engine room was flooded to a depth of 9" above the floor plates. This flooding was the result of normal seepage through the stern tubes and would have been controlled had the crew been aboard.

- (b) Structural damage.

No data taken by the machinery group.

- (c) Other damage.

Test "B" had no effect on machinery or ship control as far as could be determined from visual inspection.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

There was no evidence of shock as far as could be determined by visual inspection.

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(d) Pressure.

There was no evidence of pressure effect on machinery as far as could be determined by visual inspection.

(e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

(a) Effect on machinery and ship control.

Test "B" had no effect on machinery and ship control as far as could be determined by visual inspection.

(b) Effect on gunnery and fire control.

No comment.

(c) Effect on water-tight integrity and stability.

No comment.

(d) Effect on personnel and habitability.

Test "B" had no effect on personnel and habitability other than the effect of radioactivity.

(e) Total effect on fighting efficiency.

Test "B" had no effect on fighting efficiency except for radioactivity.

IV. General Summary of Observers' Impressions and Conclusions.

The machinery of this vessel was not affected by Test "B". No comment is offered here as to the effects of radioactivity.

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V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Machinery Damage.

The engine rooms are flooded to about 9 inches of water above the floor plates. A visual inspection revealed no damage from Test "B". The plant could probably be operated if pumped out and electrical equipment dried out.

(a) Overall condition.

Due to the flooded condition of the engine rooms the vessel is without propulsion power and current for operation of electrical equipment.

(b) Areas of major damage.

The main machinery spaces were flooded.

(c) Primary causes of damage.

Flooding caused by normal seepage of water through the stern tubes.

(d) Effect of target test on overall operation of the machinery plant.

There was no direct effect of the target test on the overall operation of the machinery plant as far as could be determined by visual inspection.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Not observed. Water was present in the machinery spaces to a level above the floor plates.

- (b) Structural damage.

Not observed.

- (c) Other damage.

The electrical equipment suffered no apparent damage or loss of operability, either directly or indirectly due to the Atom Bomb. None of the electrical equipment had been operated at the time of inspection as the ship's crew had not returned. Although the water in the machinery spaces was not in contact with electrical equipment, some of this equipment undoubtedly is inoperable due to moisture grounds.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

None.

- (c) Shock.

There was no evidence of shock damage.

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(d) Pressure.

There was no evidence of pressure damage.

(e) Any effects apparently peculiar to the Atom Bomb.

None other than radioactivity.

III. Effects of Damage.

(a) Effect on propulsion and ship control.

None other than due to possible moisture grounds.

(b) Effect on gunnery and fire control.

None.

(c) Effect on watertight integrity and stability.

Not observed.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None other than due to possible moisture grounds.

IV. General Summary of Observers' Impressions and Conclusions.

This ship was beyond the range of damage to its electrical equipment in Test "B".

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Electrical Damage.

(a) Overall condition.

No visible damage to electrical equipment other than that possibly due to the presence of salt water in the machinery spaces.

(b) Areas of major damage.

None.

(c) Primary causes of damage in each area of major damage.

None.

(d) Effect on target test on overall operation of electric plant.

The operability of the electric plant apparently was not impaired by any direct or indirect effects of the atom bomb. None of the electrical equipment was operated, however, as the ship's crew had not returned. The leakage of water, apparently through the stern tubes, had caused some water to accumulate in the machinery spaces. Some electrical equipment in the machinery spaces may therefore be inoperable due to moisture grounds.

(e) Types of equipment most affected.

None.

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APPENDIX

PHOTOGRAPHS

TEST BAKER

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USS LCT 1113



AB-CR-227-290-87. View from port bow after Test B.

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USS LCT-1113

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AB-CR-227-290-83. View from starboard quarter after Test B.

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USS LCT-1113

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BUREAU OF SHIPS GROUP
TECHNICAL INSPECTION REPORT

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USS LCT 1114

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, sources.

The vessel capsized as a result of the test. It floated bottom up with the stern awash and the bow four feet out of the water.

(b) Structural damage.

There was no apparent damage to the parts of the hull which were visible.

(c) Other damage.

This vessel was floating bottom side up, inspection of the machinery and electrical equipment was not possible.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None.

(b) Fires and explosions.

None.

(c) Shock.

None observed.

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USS LCT 1114

(d) Pressure.

The wave of water which followed the explosion of the bomb apparently caused the craft to capsize.

(e) Effects apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

(a) Effect on machinery, electrical, and ship control.

Operability completely destroyed by capsizing.

(b) Effect on gunnery and fire control.

Operability completely destroyed by capsizing.

(c) Effect on water-tight integrity and stability.

The craft capsized apparently as a result of the wave of water caused by the explosion of the bomb. Since the craft remained afloat until she was destroyed four days after the test, some water-tight integrity remained.

(d) Effect on personnel and habitability.

It is probable that all personnel would have been killed either by the direct effects of the bomb or by drowning. Habitability of the craft is destroyed completely.

(e) Total effect on fighting efficiency.

Completely destroyed.

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USS LCT 1114

IV. General Summary of Observers' Impressions and Conclusions.

It is not possible to trace the fate of the LCT 1114 during the first few minutes following the burst. When the Technical Observer in PBM Charlie One came in over the array shortly before 0900 the LCT 1114 was not sighted. At 1150 an object which had previously been noted floating alongside the ARDC 13 was tentatively identified as an LCT floating bottom up. PBM Charlie #2 flying at a lower altitude was able to confirm that the object alongside the ARDC as an LCT floating bottom up.

By the morning of Baker plus One day the LCT 1114 had drifted from the ARDC 13 to a spot between the LST 52 and the LST 661. For the next several days it drifted in a generally westerly direction until it was finally sunk off Amen Island with a demolition charge to prevent it from becoming a menace to navigation.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

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USS LCT 1114

TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

The vessel capsized as a result of the test. It floated bottom up with the stern awash and the bow four feet out of the water.

- (b) Structural damage.

There was no apparent damage to the parts of the hull which were visible.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None observed.

- (d) Pressure.

The wave of water which followed the explosion of the bomb apparently caused the craft to capsize.

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- (e) Effects peculiar to the Atomic Bomb.

None.

III. Results of Test on Target.

- (a) Effect on machinery, electrical and ship control.

Operability completely destroyed by capsizing.

- (b) Effect on gunnery and fire control.

Operability completely destroyed by capsizing.

- (c) Effect on watertight integrity and stability.

The craft capsized apparently as a result of the wave of water caused by the explosion of the bomb. Since the craft remained afloat until she was destroyed four days after the test, some watertight integrity remained.

- (d) Effect on personnel and habitability.

It is probable that all personnel would have been killed either by the direct effects of the bomb or by drowning. Habitability of the craft is destroyed completely.

- (e) Effect on fighting efficiency.

Completely destroyed.

IV. General Summary.

It is not possible to trace the fate of the LCT 1114 during the first few minutes following the burst. When the Technical Observer in PBM Charlie One came in over the array shortly before 0900 the LCT 1114 was not sighted. At 1150 an object which had previously been noted floating alongside the ARDC 13 was tentatively identified as an LCT floating bottom up. PBM Charlie #2 flying at a lower altitude was

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U. S. S. LCT 1114

able to confirm that the object alongside the ARDC as an LCT floating bottom up.

By the morning of Baker plus One day the LCT 1114 had drifted from the ARDC 13 to a spot between the LST 52 and the LST 661. For the next several days it drifted in a generally westerly direction until it was finally sunk off Amoen Island with a demolition charge to prevent it from becoming a menace to navigation.

V. Recommendations.

None.

VI. Instructions for Loading the Vessel Specified the Following:

ITEM	LOADING
Diesel oil	Minimum
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast	quired.

Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available in the Bureau of Ships Cross-roads Files.

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U. S. S. LCT 1114

DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Hull Damage.

This vessel was capsized and torn loose from its moorings. It floated bottom up and drifted into the western end of Bikini lagoon where it was destroyed to prevent it becoming a menace to navigation. The bottom was awash aft and about four feet out of water forward. The bow ramp was closed. There was no evidence of damage to the bottom of the vessel or to those parts of the sides of the vessel which projected above the surface of the water.

F. Exterior Hull.

No damage visible to those parts which projected above the surface of the water.

J. Underwater Hull.

No damage visible to the part of the hull which projected above the surface of the water.

K. Tanks.

No damage visible.

L. Flooding.

The vessel was capsized as a result of the test. It floated bottom up with the stern awash and the bow four feet out of the water.

N. Ship Control.

Completely inoperable due to capsizing.

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O. Fire Control.

Completely inoperable due to capsizing.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

The wave action of Test "B" capsized this vessel.

- (b) Structural damage.

No comment.

- (c) Other damage.

The machinery of this vessel was not inspected, although there probably was considerable damage due to shock, plus that incident to flooding when the vessel capsized.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

This vessel received a heavy underwater shock. Had inspection been possible considerable damage would probably have been found.

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(d) Pressure.

No evidence.

(e) Any effects apparently peculiar to the Atom Bomb.

The magnitude of wave action to capsize this vessel.

III. Effects of Damage.

(a) Effect on machinery and ship control.

The estimated shock damage and complete flooding make the vessel a total loss.

(b) Effect on gunnery and fire control.

No comment.

(c) Effect on water-tight integrity and stability.

No comment.

(d) Effect on personnel and habitability.

It is believed there would have been many casualties due to shock and the fact that the vessel capsized.

(e) Total effect on fighting efficiency.

The fighting efficiency of this vessel was reduced to zero.

IV. General Summary of Observers' Impressions and Conclusions.

Due to the fact the vessel was capsized, it was well in the range of physical damage from the explosion in Test "B".

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V. Any Preliminary General or Specific Recommendations of the
Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Machinery Damage.

No machinery was inspected, however it is believed there is considerable shock damage. All machinery was made inoperable because of complete flooding when the vessel capsized.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

This vessel capsized as a result of this test.

- (b) Structural damage.

Structural damage was not observed.

- (c) Other damage.

This vessel was floating bottom side up, inspection of the electrical equipment was not possible.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None observed.

- (c) Shock.

None observed.

- (d) Pressure.

Effect of pressure on electrical equipment was not observed.

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- (e) Any effects apparently peculiar to the Atomic Bomb.

None observed.

III. Results of Test on Target.

- (a) Effect on electrical equipment and ships control.

Operability of electrical equipment destroyed by capsizing.

- (b) Effect on gunnery and fire control.

Operability completely destroyed by capsizing.

- (c) Effect on watertight integrity and stability.

Not observed.

- (d) Effect on personnel and habitability.

Habitability was completely destroyed. It is considered all personnel would have been killed either directly as result of the test or by drowning.

- (e) Effect on fighting efficiency.

Completely destroyed.

IV. General Summary of Observers' Impressions and Conclusions.

None.

V. Any Preliminary, General or Specific Recommendations.

None.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Electrical Damage.

(a) Overall condition.

All electrical was rendered inoperable from submersion. extent of electrical damage as a direct result of the explosion is not known as inspection was not possible.

(b) Areas of major damage.

Not observed.

(c) Primary cause of damage in each major area.

Not observed.

(d) The effects of the target test on the overall operation of the electric plant.

The electric plant was rendered inoperable from submersion.

(e) Types of equipment most affected.

Not observed.

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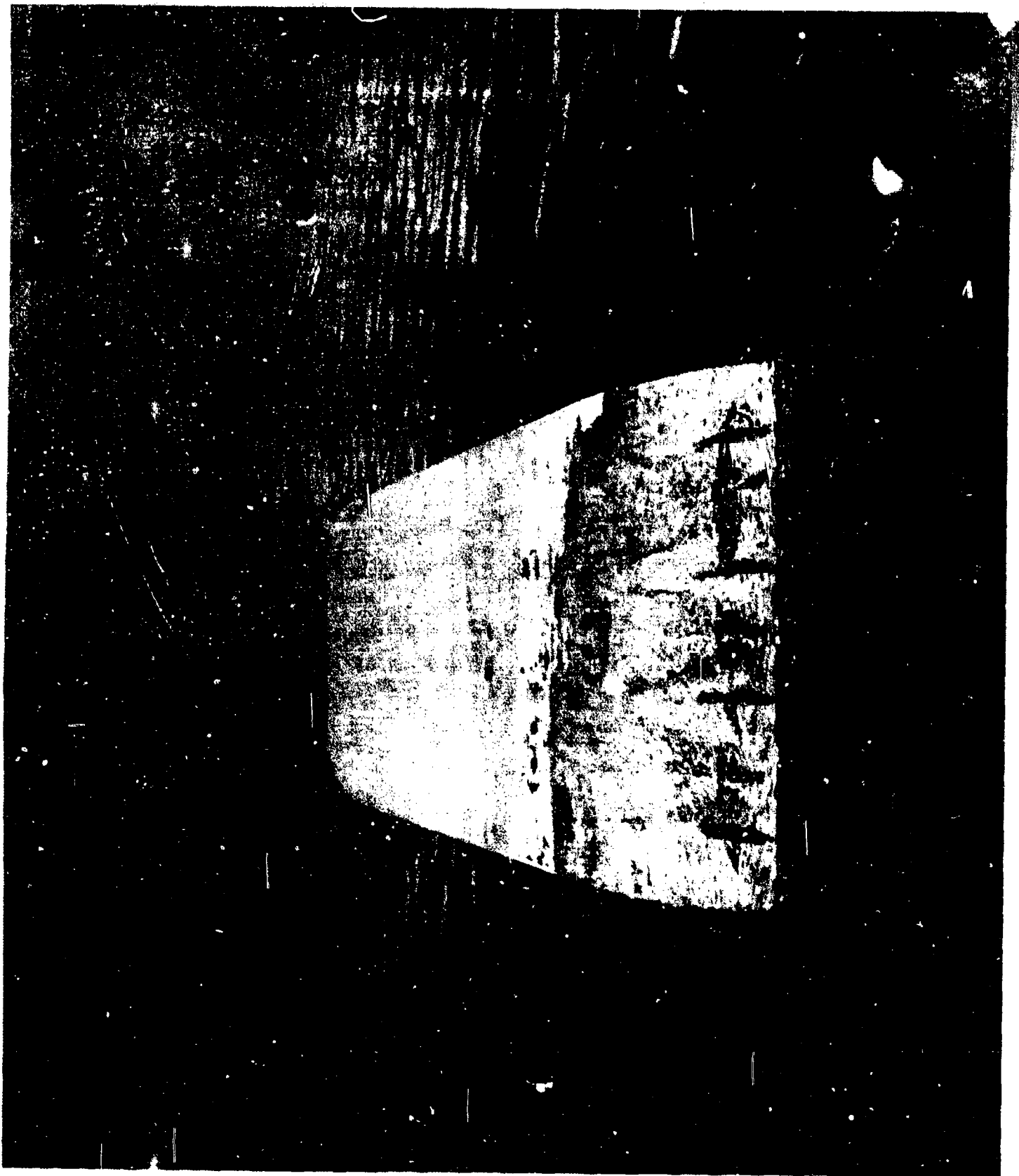
APPENDIX

PHOTOGRAPHS

TEST BAKER

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USS LCT 1114



AB-CR-80-2093-4. View from stern after Test B.

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USS LCT-1114

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AB-CR-80-2093-5. View from port beam.

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TECHNICAL INSPECTION REPORT

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USS LCT 1115

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TECHNICAL INSPECTION REPORT

OVERALL SUMMARY

I. Target Condition After Test.

(a) Drafts after test; list; general areas of flooding, sources.

The vessel was down by the bow with a slight port list. The forward tanks were flooded full. Flooding of these tanks was the result of previous grounding damage. The #7 centerline tank had 12" of water from an unknown source. There is 3" of normal leakage into the engine space through the stern tubes.

(b) Structural damage.

No damage.

(c) Other damage.

None.

II. Forces Evidenced and Effects Noted.

(a) Heat.

None.

(b) Fires and explosions.

None.

(c) Shock.

None.

(d) Pressure.

None.

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(e) Effects apparently peculiar to the atom bomb.

None.

III. Effects of Damage.

(a) Effect on machinery, electrical, and ship control.

None.

(b) Effect on gunnery and fire control.

No effect.

(c) Effect on water-tight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Total effect on fighting efficiency.

None.

IV. General Summary of Observers' Impressions and Conclusions.

No comment.

V. Preliminary General or Specific Recommendations of Inspection Group.

None.

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TECHNICAL INSPECTION REPORT

SECTION I - HULL

GENERAL SUMMARY OF HULL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

The vessel was down by the bow with a slight port list. The forward tanks were flooded full. Flooding of these tanks was the result of previous grounding damage. The #7 centerline tank had 12'' of water from an unknown source. There is 3'' of normal leakage into the engine space through the stern tubes.

- (b) Structural damage.

No damage.

- (c) Other damage.

Not observed.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

None.

- (b) Fires and explosions.

None.

- (c) Shock.

None.

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(d) Pressure.

None.

(e) Effects peculiar to the Atomic Bomb.

None.

III. Results of Test on Target.

(a) Effect on machinery, electrical and ship control.

Not observed.

(b) Effect on gunnery and fire control.

Not observed.

(c) Effect on watertight integrity and stability.

None.

(d) Effect on personnel and habitability.

None.

(e) Effect on fighting efficiency.

None.

IV. General Summary.

No comment.

V. Recommendations.

None.

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U. S. S. LCT 1115

VI. Instructions for Loading the Vessel Specified the Following:

ITEM

Diesel oil	Minimum
Ammunition	No special ad-
Potable and reserve feed water	justment re-
Salt water ballast	quired.

Details of the actual quantities of the various items aboard are included in Report 7, Stability Inspection Report, submitted by the ship's force in accordance with "Instructions to Target Vessels for Tests and Observations by Ship's Force" issued by the Director of Ships Material. This report is available for inspection in the Bureau of Ships Crossroads Files.

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U. S. S. LCT 1115

DETAILED DESCRIPTION OF HULL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

L. Flooding.

Normal stern tube leakage filled the engine space to a depth of 3 inches. The forward tanks filled completely and #7 tank to a depth of 12 inches. This flooding is probably the result of previous grounding damage.

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TECHNICAL INSPECTION REPORT

SECTION II - MACHINERY

GENERAL SUMMARY OF MACHINERY DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

No data taken by machinery group.

- (b) Structural damage.

No data taken by machinery group.

- (c) Other damage.

Test "B" had no apparent effect on operability of machinery.

II. Forces Evidenced and Effects Noted.

- (a) Heat.

No evidence on machinery.

- (b) Fires and explosions.

No evidence.

- (c) Shock.

No evidence.

- (d) Pressure.

No evidence.

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- (e) Any effects apparently peculiar to the Atom Bomb.

None.

III. Effects of Damage.

- (a) Effect on machinery and ship control.

Test "B" had no effect on machinery and ship control.

- (b) Effect on gunnery and fire control.

No comment.

- (c) Effect on water-tight integrity and stability.

No comment.

- (d) Effect on personnel and habitability.

Test "B" had no effect on personnel or habitability other than the effect of radioactivity.

- (e) Total effect on fighting efficiency.

Test "B" had no effect on fighting efficiency except for radioactivity.

IV. General Summary of Observers' Impressions and Conclusions.

The machinery of this vessel was not affected by Test "B". No comment is offered here as to effects of radioactivity.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

None.

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DETAILED DESCRIPTION OF MACHINERY DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

A. General Description of Machinery Damage.

All machinery was visually inspected and appears to be undamaged. The starboard diesel generator was operated for about 15 minutes, the three main engines and the port diesel generator were turned over by battery, they all appear to be in a satisfactory operating condition.

The overall condition of machinery was not changed by the test, it is believed the vessel could be put in operation within a few hours.

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TECHNICAL INSPECTION REPORT

SECTION III - ELECTRICAL

GENERAL SUMMARY OF ELECTRICAL DAMAGE

I. Target Condition After Test.

- (a) Drafts after test; list; general areas of flooding, sources.

Not observed.

- (b) Structural damage.

Not observed.

- (c) Other damage.

All electrical machinery was operated except port ship's service generator engine which could not be started.

II. Forces Evident and Effects Noted.

- (a) Heat.

No evidence of heat.

- (b) Fires and explosions.

No fires or explosions on board.

- (c) Shock.

No evidence of shock damage to electrical equipment.

- (d) Pressure.

No evidence of pressure damage to electrical equipment.

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- (e) Any effect apparently peculiar to the Atom Bomb.

No effects peculiar to the Atom Bomb were noted.

III. Effects of Damage.

- (a) Effect on electrical equipment and ship control.

No effect on propulsion or ship control.

- (b) Effect on gunnery and fire control.

No effect on gunnery or fire control.

- (c) Effect on watertight integrity and stability.

No effect on watertight integrity or stability.

- (d) Effect on personnel and habitability.

No effect on habitability.

- (e) Total effect on fighting efficiency.

No effect on fighting efficiency of the vessel.

IV. General Summary of Observers' Impressions and Conclusions.

The vessel suffered no electrical damage from the underwater burst.

V. Any Preliminary General or Specific Recommendations of the Inspecting Group.

No recommendations.

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DETAILED DESCRIPTION OF ELECTRICAL DAMAGE

NOTE: The only items discussed below are those where damage occurred. All items omitted either received no damage or are not applicable.

There was no damage.

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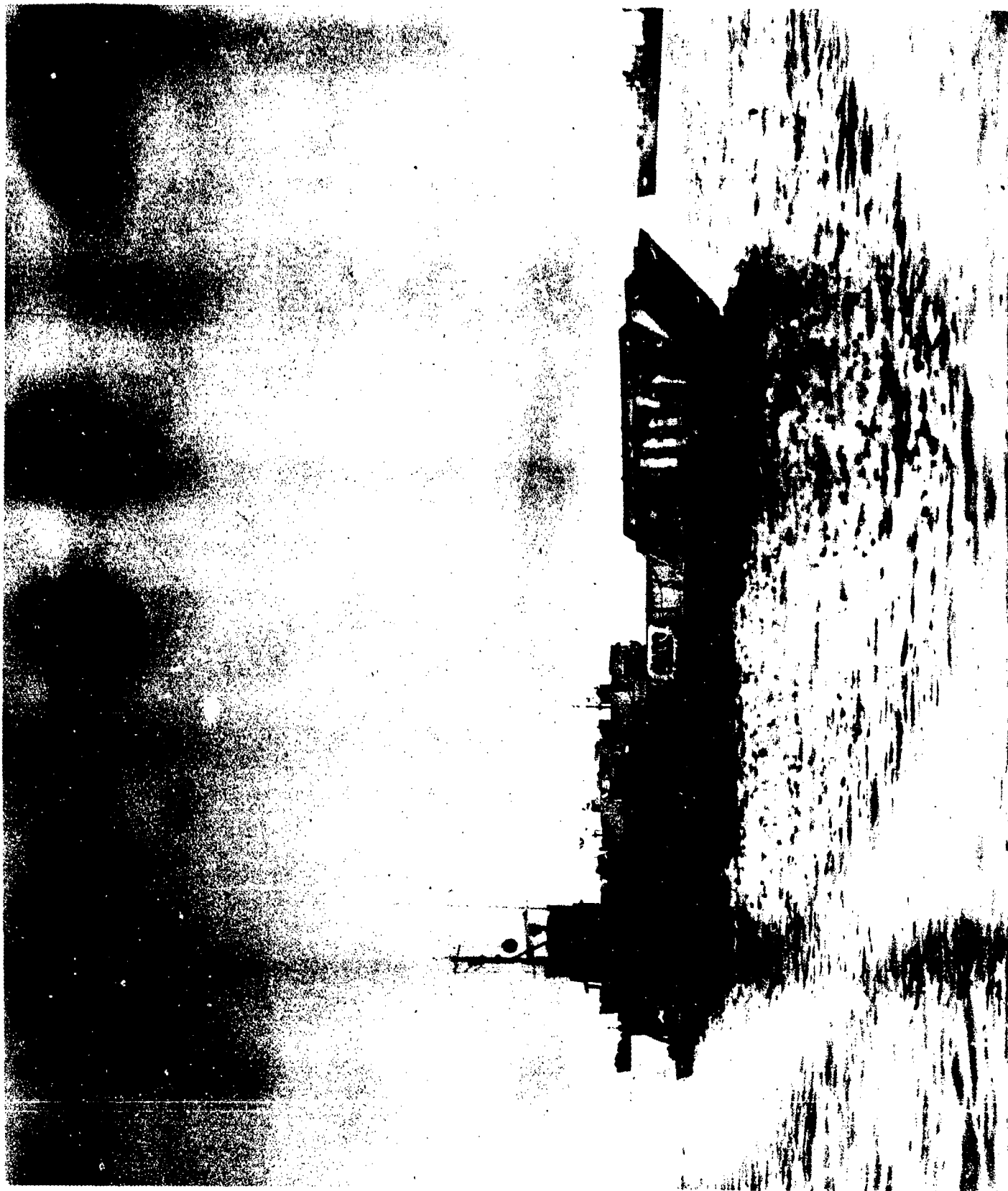
APPENDIX

PHOTOGRAPHS

TEST BAKER

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USS LCT 1115



AB-CR-227-283-120. View from starboard bow after Test B.

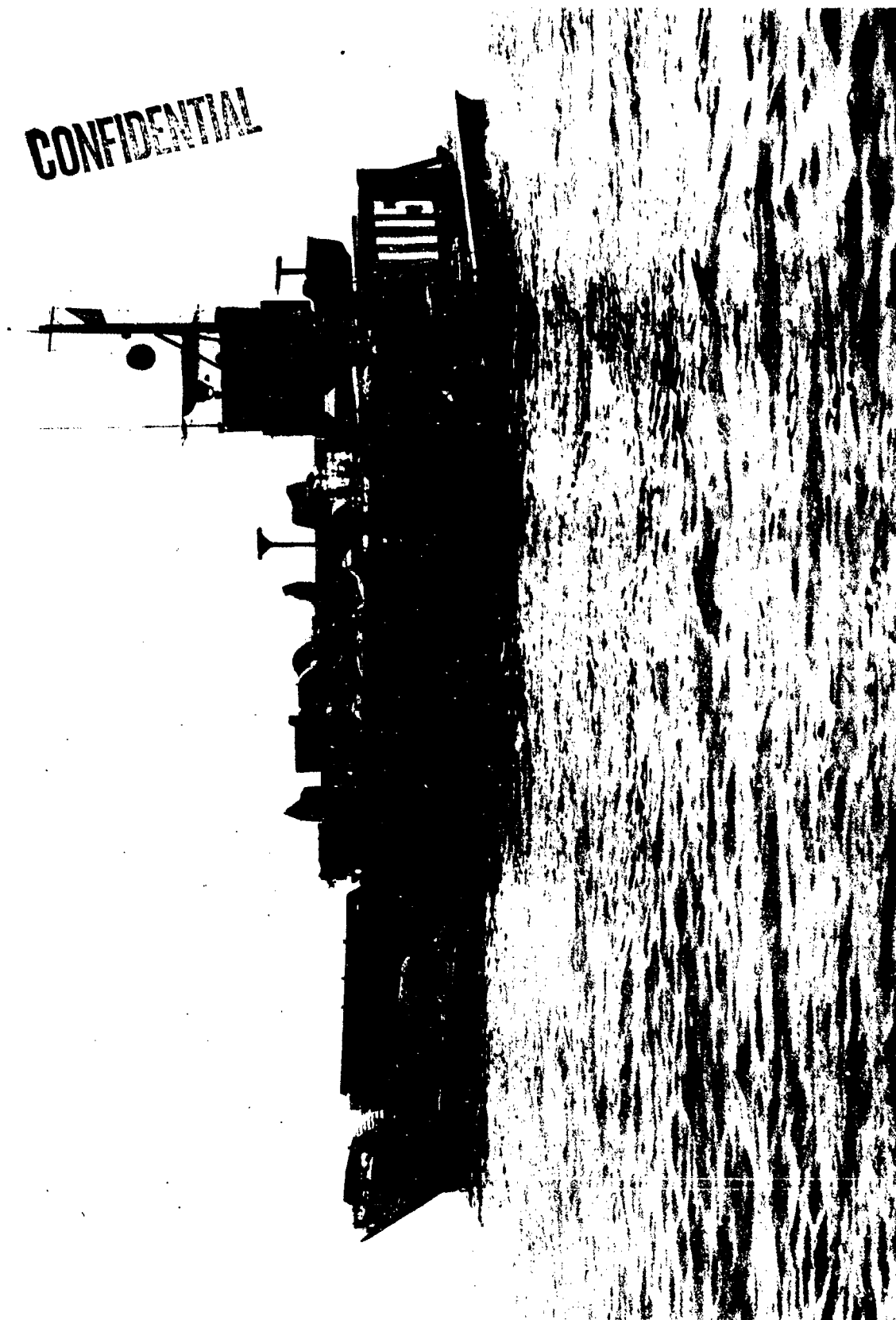
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USS LCT-1115

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CONFIDENTIAL



AB-CR-227-283-124. View from port quarter after Test B.



CONFIDENTIAL



Defense Special Weapons Agency
6801 Telegraph Road
Alexandria, Virginia 22310-3398

TRC

18 April 1997

MEMORANDUM FOR DEFENSE TECHNICAL INFORMATION CENTER
ATTENTION: OMI/Mr. William Bush (Security)

SUBJECT: Declassification of Reports

The Defense Special Weapons Agency has declassified the following reports:

✓AD-366588 4	XRD-203-Section 12✓
AD-366589 ✓	XRD-200-Section 9
AD-366590 ✓	XRD-204-Section 13
AD-366591 ✓	XRD-183
✓AD-366586 X	XRD-201-Section 10✓
✓AD-367487 ✓	XRD-131-Volume 2 ✓
AD-367516 4	XRD- 1 143✓
AD-367493 ✓	XRD-142✓
AD-801410L✓	XRD-138
AD-376831L✓	XRD-83
AD-366759 ✓	XRD-80
AD-376830L X	XRD-79✓
AD-376828L 4	XRD-76✓
AD-367464 X	XRD-106✓
AD-801404L✓	XRD-105-Volume 1
AD-367459 X	XRD-100✓

TRC

18 April 1997

Subject: Declassification of Reports

AD-801406L ✓ XRD-114.

In addition, all of the cited reports are now **approved for public release; distribution statement "A" now applies.**

Arduith Jarrett
ARDITH JARRETT
Chief, Technical Resource Center